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REPORTS

FROM

COMMITTEES:

ELEVEN VOLUMES.

— *(9.)* —

MINES.

Session

1 *February* —— 10 *August* 1866.

VOL. XIV.

1866.

REPORTS FROM COMMITTEES:

1866.

ELEVEN VOLUMES:—CONTENTS OF THE

NINTH VOLUME.

N.B.—*THE* Figures *at the* beginning of the line, *correspond with the* N° *at the foot of each* Report; *and the* Figures *at the* end of the line, *refer to the* MS. Paging *of the Volumes arranged for The House of Commons.*

MINES:

431. REPORT from the Select Committee on MINES; together with the PROCEEDINGS of the COMMITTEE, MINUTES of EVIDENCE, and APPENDIX - - - - - - - - - - p. 1

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REPORT

FROM THE

SELECT COMMITTEE

ON

MINES;

TOGETHER WITH THE

PROCEEDINGS OF THE COMMITTEE,

MINUTES OF EVIDENCE,

AND APPENDIX.

Ordered, by The House of Commons, *to be Printed,*
23 *July* 1866.

Thursday, 15*th February* 1866.

Ordered, That a Select Committee be appointed to inquire into the operation of the Acts for the regulation and inspection of Mines, and into the complaints contained in Petitions from Miners of Great Britain with reference thereto, which were presented to the House during the last Session.

Wednesday, 7*th March* 1866.

Committee nominated of,—

Mr. Bruce.	Mr. Ayrton.
Mr. Liddell.	General Dunne.
Mr. Neate.	Mr. Clive.
Mr. Greenall.	Mr. Ferrand.
Mr. Fawcett.	Mr. Hussey Vivian.
Sir Philip Egerton.	Viscount Cranborne.
Mr. Kinnaird.	Mr. Woods.
Mr. Powell.	

Ordered, That the Committee have power to send for Persons, Papers, and Records.

Ordered, That Five be the Quorum of the Committee.

Friday, 9*th March* 1866.

Ordered, That the Committee do consist of Seventeen Members.

Ordered, That Mr. William Orme Foster and Mr. Bromley be added to the Committee.

Monday, 23*rd July* 1866.

Ordered, That the Committee have power to report their Observations, together with the Minutes of Evidence taken before them, to The House.

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REPORT.

THE SELECT COMMITTEE appointed to inquire into the Operation of the Acts for the Regulation and Inspection of Mines, and into the Complaints contained in Petitions from Miners of *Great Britain*, with reference thereto, which were presented to the House during the last Session;——Have considered the matter to them referred, and have agreed to the following REPORT:—

Your Committee have examined a great number of witnesses upon the subject-matter referred to them, but are not yet in a condition to say whether on certain points further Evidence may not be desirable; they have therefore agreed to Report the Evidence already taken to the House, with a recommendation that the Committee be reappointed in the next Session of Parliament.

23 *July* 1866.

PROCEEDINGS OF THE COMMITTEE.

Friday, 9th March 1866.

MEMBERS PRESENT:

Mr. Ayrton.	Mr. Greenall.
Mr. Neate.	Mr. Kinnaird.
Mr. Woods.	Mr. Fawcett.

Mr. *Neate* called to the Chair.

The Committee deliberated.

[Adjourned to Monday, 19th March, at One o'clock.

Monday, 19th March 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Sir P. Egerton.	Mr. Bromley.
Mr. W. O. Foster.	Mr. Bruce.
Mr. Greenall.	Mr. Fawcett.
Mr. Woods.	Mr. Kinnaird.

Peter Dickinson examined

[Adjourned to Thursday next, at Twelve o'clock.

Thursday, 22nd March 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Kinnaird.	Mr. Bruce.
Mr. Ferrand.	Mr. Fawcett.
Mr. Woods.	Mr. Bromley.
Mr. W. O. Foster.	Mr. Greenall.

Wm. Baxendale, *William Pickard*, and *Maurice Mullin*, were severally examined.

[Adjourned to Tuesday, 17th April, at Twelve o'clock.

Tuesday, 17th April 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Wood.	Mr. Powell.
Mr. Clive.	Mr. Kinnaird.
General Dunne.	Mr. Greenall.
Mr. Liddell.	Mr. Hussey Vivian.
Mr. Foster.	

Mr. *William Pickard* further examined.

Room cleared.—The Committee deliberated as to the introduction of the subject of Special Rules into the examination.

[Adjourned to Thursday next, at Twelve o'clock.

Thursday, 19*th April* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Liddell.	Mr. Foster.
General Dunne.	Mr. Kinnaird.
Mr. Ferrand.	Mr. Bruce.
Mr. Woods.	Mr. Clive.
Mr. Ayrton.	Mr. Fawcett.

The Committee further deliberated as to the admission of Special Rules into the evidence.

Mr. *James Ackersley* examined.

Room cleared.—The Committee deliberated.—Motion made and question put, "That the Paper numbered 8 in the Appendix be altered by the omission of the column relating to the price obtained by the sale of coal," (Mr. *Vivian.*)

The Committee divided:—

Ayes, 4.	Noes, 4.
Mr. Vivian.	Mr. Ayrton.
Mr. Bruce.	Mr. Clive.
Mr. Foster.	Mr. Liddell.
Mr. Woods.	Mr. Fawcett.

Whereupon the Chairman declared himself with the Noes.

Mr. *Robert Woodward* examined.

[Adjourned to To-morrow, at Two o'clock.

Friday, 20*th April* 1866.

MEMBERS PRESENT:

Mr. Neate.	General Dunne.
Mr. Clive.	

[The Committee adjourned to Monday next, at One o'clock.

Monday, 23*rd April* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Bruce.	Mr. Clive.
Sir Philip Egerton.	General Dunne.
Mr. Ferrand.	Mr. Hussey Vivian.
Mr. Woods.	Mr. Kinnaird.
Mr. Liddell.	Mr. Foster.
Mr. Greenall.	

Mr. *John Normansell* examined.

[Adjourned to Thursday next, at Twelve o'clock.

Thursday, 26*th April* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Sir Philip Egerton.	Mr. Liddell.
Mr. Ferrand.	Mr. W. O. Foster.
Mr. Kinnaird.	Mr. Powell.

Mr. *John Normansell* further examined.

[Adjourned to Monday next, at Twelve o'clock.

Monday, 30*th April* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Woods.	Sir Philip Egerton.
Mr. Liddell.	Mr. Clive.
Mr. Greenall.	Mr. Kinnaird.
Mr. Foster.	

Thomas Mottershaw and *Samuel Cartlidge* were severally examined.

[Adjourned to Thursday next, at Twelve o'clock.

Thursday, 3*rd May* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Sir. Philip Egerton.	Mr. Clive.
Mr. Liddell.	Mr. Fawcett.
Mr. Foster.	Mr. Vivian.
Mr. Greenall.	Mr. Kinnaird.

Joseph Booth, *James Wilkins*, and *Andrew Hall*, were severally examined.

[Adjourned to Monday next, at Twelve o'clock.

Monday, 7*th May* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

General Dunne.	Mr. Greenall.
Sir Philip Egerton.	Mr. Powell.
Mr. Liddell.	Mr. Clive.

Mr. *William Millward* and Mr. *Benjamin Owen* were severally examined.

[Adjourned to Thursday next, at One o'clock.

Thursday, 10*th May* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Sir Philip Egerton.	Mr. Woods.
Mr. Greenall.	Mr. Clive.
Mr. Liddell.	Mr. Foster.
Mr. Fawcett.	

Mr. *Enoch Onions* examined.

[Adjourned to Monday next, at Twelve o'clock.

Monday, 14*th May* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Vivian.	Sir Philip Egerton.
General Dunne.	Mr. Henry Austin Bruce.
Mr. Clive.	Mr. Foster.
Mr. Powell.	Mr. Greenall.
Mr. Liddell.	Mr. Kinnaird.

Mr. *George Parker* and Mr. *John Griffiths* were severally examined.

[Adjourned to Thursday next, at Twelve o'clock.

Thursday, 17*th May* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

General Dunne.	Sir Philip Egerton.
Mr. Kinnaird.	Mr. Woods.
Mr. Powell.	

Mr. *Alexander M'Donald* examined.

[Adjourned to Tuesday, 29th May, at Twelve o'clock.

Tuesday, 29*th May* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Clive.	Mr. Kinnaird.
Sir. P. Egerton.	Mr. W. O. Foster.
Mr. Greenall.	General Dunne.
Mr. Liddell.	Mr. Fawcett.
Mr. Vivian.	

Mr. *Joseph Dickinson* examined.

[Adjourned to Friday next, at Twelve o'clock.

Friday, 1*st June* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

General Dunne.	Mr. Kinnaird.
Mr. Woods.	Mr. Fawcett.
Mr. Liddell.	Mr. Greenall.
Mr. Foster.	Mr. Hussey Vivian.

Mr. *Ralph Moore* examined.

Mr. *Alexander M'Donald* and Mr. *Ralph Moore* were severally further examined.

[Adjourned to Monday next, at One o'clock.

Monday, 4*th June* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

General Dunne.	Mr. Foster.
Mr. Liddell.	Mr. Kinnaird.
Mr. Clive.	Sir P. Egerton.
Mr. Greenall.	

Mr. *Joseph Dickinson* and Mr. *Alexander M'Donald* were severally further examined.

[Adjourned to Thursday next, at Twelve o'clock.

Thursday, 7*th June* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Foster.	Mr. Clive.
Sir P. Egerton.	Mr. Fawcett.
Mr. Liddell.	Lord Cranborne.
Mr. Greenall.	Mr. Kinnaird.
Mr. Ayrton.	

Mr. *Joseph Dickinson* and Mr. *Ralph Moore* were severally further examined.

Mr. *John Job Atkinson* examined.

[Adjourned to Monday next, at Twelve o'clock.

Monday, 11*th June* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Liddell.	Mr. Woods.
Mr. Ayrton.	Mr. Clive.
Sir Philip Egerton.	General Dunne.
Mr. Greenall.	Mr. Foster.
Mr. Kinnaird.	

Mr. *Thomas Evans* examined.

[Adjourned to Thursday next, at Twelve o'clock.

Thursday, 14*th June* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Ayrton.	Mr. Kinnaird.
Mr. Liddell.	Mr. Greenall.
Mr. Foster.	Mr. Powell.
Sir Philip Egerton.	Mr. Woods.
Mr. Fawcett.	

Rev. *Henry R. Sandford* and Mr. *George F. Ansell* were severally examined.

[Adjourned to Monday next, at Twelve o'Clock.

Monday, 18*th June* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Ayrton.	Mr. Greenall.
Mr. Foster.	Mr. Kinnaird.
Mr. Fawcett.	General Dunne.
Mr. Liddell.	Mr. Clive.
Sir Philip Egerton.	Mr. Hussey Vivian.
Mr. Woods.	

Mr. *Thomas E. Forster*, Mr. *Edward Potter*, Mr. *John Taylor*, Mr. *John Daglish*, and Mr. *Anthony Davidson*, were severally examined.

[Adjourned to Thursday next, at Twelve o'Clock.

Thursday, 21*st June* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Woods.	Mr. Powell.
General Dunne.	Mr. Kinnaird.
Mr. Liddell.	Mr. Bruce.
Mr. W. O. Foster.	Mr. Clive.

Mr. *George Gilroy* examined.

[Adjourned to Monday next, at Twelve o'clock.

Monday, 25*th June* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Liddell.	Mr. Greenall.
Mr. W. O. Foster.	Mr. Powell.
Sir Philip Egerton.	Mr. Kinnaird.
Mr. Woods.	Mr. Fawcett.

Mr. *Samuel Winn Broadbent*, Mr. *Alfred Hewlett*, Mr. *Isaiah Booth*, and Mr. *Thomas Knowles*, were severally examined.

[Adjourned to Thursday next, at Twelve o'clock.

Thursday, 28*th June* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Fawcett.	Sir Philip Egerton.
Mr. Liddell.	Mr. Bruce.
Mr. Greenall.	General Dunne.
Mr. W. O. Foster.	Mr. Kinnaird.
Mr. Woods.	Mr. G. Clive.

Mr. *Thomas Wm. Jeffcock* and Mr. *John Chambers* were severally examined.

Room cleared. Committee deliberated.

[Adjourned to Monday next, at Twelve o'clock.

Monday, 2*nd July* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. W. O. Foster.	Mr. Powell.
General Dunne.	Mr. George Clive.
Mr. Liddell.	Sir Philip Egerton.
Mr. Woods.	Mr. Kinnaird.

Mr. *William Mathews*, Mr. *William A. Potter*, Mr. *Philip Cooper*, and Mr. *John Platts*, were severally examined.

[Adjourned to Thursday next, at Twelve o'clock.

Thursday, 5*th July* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. W. O. Foster.	Mr. Fawcett.
Sir Philip Egerton.	Mr. Kinnaird.
Mr. Woods.	Mr. Ayrton.
Mr. Liddell.	General Dunne.
Mr. Hussey Vivian.	

Mr. *John Ward*, Mr. *J. W. Day*, Mr. *J. T. Woodhouse*, and Mr. *Edward Jones*, were severally examined.

Mr. *John Normansell* further examined.

[Adjourned to To-morrow, at Twelve o'clock.

Friday, 6*th July* 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Woods.	Mr. Kinnaird.
Mr. W. O. Foster.	Mr. Powell.
Mr. Fawcett.	Mr. Ayrton.
Mr. Liddell.	Mr. C. Clive.
General Dunne.	

Mr. *Edward Jones* further examined.

Mr. *James Robertson*, Mr. *Archibald Hood*, and Mr. *William Burns*, were severally examined.

[Adjourned till Monday, at Twelve o'clock.

Monday, 9th July 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Liddell.	Mr. Woods.
Mr. Vivian.	Mr. Foster.
Mr. Powell.	Mr. Clive.
General Dunne.	Mr. Kinnaird.

Mr. *William Burns* further examined.

Mr. *J. W. Ormiston* examined.

Room cleared, and Committee deliberated.

[Adjourned till Thursday, at Twelve o'clock.

Thursday, 12th July 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Foster.	Mr. Greenall.
Mr. Liddell.	Mr. Kinnaird.

Mr. *J. W. Ormiston*, Mr. *William Burns*, and Mr. *J. W. Day*, were severally further examined.

Mr. *James Baird* examined.

[Adjourned till Thursday next, at Twelve o'clock.

Thursday, 19th July 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

Mr. Liddell.	Mr. Ayrton.
Mr. Greenall.	Mr. Fawcett.
Mr. Kinnaird.	

Mr. *John Normansell* further examined.

Mr. *Thomas Wynne* and Mr. *J. P. Baker* were severally examined.

[Adjourned to To-morrow, at Three o'clock.

Friday, 20th July 1866.

MEMBERS PRESENT:

Mr. NEATE in the Chair.

General Dunne.	Sir Philip Egerton.
Mr. Greenall.	Mr. Liddell.

Draft Report proposed by the Chairman, read a first time, as follows:

"Your Committee have examined a great number of witnesses upon the subject matter referred to them, but are not yet in a condition to say whether on certain points further evidence may not be desirable, and they have therefore agreed to report the evidence already taken to the House, with a recommendation that the Committee be re-appointed in the next Session of Parliament."

Report read a second time, and *agreed to.*

Question, That this Report be the Report of the Committee to the House, put, and *agreed to.*

Ordered to Report, together with the Minutes of Evidence, and an Appendix.

EXPENSES OF WITNESSES.

NAME of WITNESS.	PROFESSION or CONDITION.	From whence Summoned.	Number of Days Absent from Home under Orders of Committee.	Expenses of Journey to London and Back.	Allowance during Absence from Home.	TOTAL Expenses allowed to Witness.
				£. s. d.	£. s. d.	£. s. d.
Peter Dickinson	Miner	Wigan	4	2 13 6	2 2 –	4 15 6
William Pickard	Miner	Wigan	7	2 13 6	3 13 6	6 7 –
John Howard	Miner	Wigan	7	2 13 6	3 13 6	6 7 –
Maurice Mullin	Miner	Wigan	7	2 13 6	3 13 6	6 7 –
William Baxendale	Miner	Wigan	7	2 13 6	3 13 6	6 7 –
William Pickard	Miner	Wigan	3	2 13 6	1 11 6	4 5 –
James Ackersley	Miner	Wigan	5	2 13 6	2 12 6	5 6 –
John Normansell	Master Miner	Barnsley	10	2 12 –	6 6 –	8 18 –
Andrew Hall	Miner	Basford	3	1 15 –	1 11 6	3 6 6
Joseph Booth	Miner	Hyde	3	2 11 –	1 11 6	4 2 6
James Wilkins	Miner	Basford	3	1 15 –	1 11 6	3 6 6
Benjamin Owen	Miner	Pipton	3	1 19 –	1 11 6	3 10 6
William Milward	Miner	Bilston	3	1 17 –	1 11 6	3 8 6
Enoch Onions	Miner	Wellington	3	1 11 6	2 6 –	3 18 6
Alexander M'Donald	Master Miner and Inspector.	Glasgow	3	7 5 –	3 3 –	10 8 –
Ralph Moore	Inspector of Mines	Glasgow	11	9 15 –	11 11 –	21 6 –
Joseph Dickinson	Inspector of Mines	Manchester	1	—	—	—
J. P. Baker	Inspector of Mines	Wolverhampton	3	2 10 –	3 3 –	5 13 –
Mr. Thomas Evans	Inspector of Mines	Belper	7	2 17 –	7 7 –	10 4 –
Mr. John Atkinson	Inspector of Mines	Fence Houses	3	6 2 –	3 3 –	9 5 –
Mr. Thomas Wynne	Inspector of Mines	Stone	3	3 – –	3 3 –	6 3 –
Mr. J. W. Day	Secretary to Miners' Association.	Chesterfield	6	6 2 –	6 6 –	12 8 –
John W. Ormiston	Master Miner	Glasgow	3	7 10 –	3 3 –	10 13 –
John Taylor	Mining Engineer	Newcastle-on-Tyne	3	5 18 –	3 3 –	9 1 –
Isaiah Booth	Mining Engineer	Oldham	8	7 10 –	8 8 –	15 18 –
P. Cooper	Mining Engineer	Rotherham	2	4 8 –	2 2 –	6 10 –
John Platts	Mining Engineer	Barnsley	6	5 17 6	6 6 –	12 3 6
Thomas W. Jeffcock	Mining Engineer	Sheffield	3	2 10 –	3 3 –	5 13 –
John Chambers	Mining Engineer	Sheffield	8	8 5 –	8 8 –	16 13 –
J. T. Woodhouse	Mining Engineer	Derby	6	2 2 –	6 6 –	8 8 –
J. Ward	Mining Agent	Chesterfield	4	6 3 –	4 4 –	10 7 –
William Burns	Solicitor	Glasgow	5	5 5 –	10 10 –	15 15 –
James Baird	Gentleman	Leith	6	10 16 –	6 6 –	17 2 –
James Robertson	Coalmaster	Renfrew	4	7 18 6	4 4 –	12 2 6
Archibald Hood	Gentleman	Lasswade	3	9 13 –	3 3 –	12 16 –
Thomas Knowles	Gentleman	Wigan	3	2 15 6	3 3 –	5 18 6
George Gilroy	Coalmaster	Wigan	5	3 13 6	5 5 –	8 18 6
Alfred Hewlett	Gentleman	Wigan	8	7 10 –	8 8 –	15 18 –
S. W. Broadbent	Surgeon	Durham	8	10 – –	16 16 –	26 16 –
Anthony Davidson	Surgeon	Northumberland	3	5 13 6	6 6 –	11 19 6
John Daglish	Colliery Manager	Durham	3	5 5 –	3 3 –	8 8 –
Thomas E. Forster	Colliery Viewer	Northumberland	3	5 6 6	3 3 –	8 9 6
William A. Potter	Mining Engineer	Barnsley	6	6 10 –	6 6 –	12 16 –
Edward Jones	Mining Agent	– – –	3	2 17 –	3 3 –	6 – –
Edward Potter	Mining Engineer	Newcastle-on-Tyne	3	6 10 –	3 3 –	9 13 –
				TOTAL £.		413 11 6

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MINUTES OF EVIDENCE.

Wednesday, 14*th June* 1865.

MEMBERS PRESENT:

Mr. Ayrton.
Mr. Bruce.
Mr. Clive.
Colonel Dunne.
Mr. Greenall.
Mr. Kinnaird.
Mr. Liddell.
Mr. Neate.
Mr. Hussey Vivian.

ACTON SMEE AYRTON, Esq., in the Chair.

Mr. Thomas Burt, called in; and Examined.

1. *Chairman.*] What are you? — A Coal Hewer.

2. How long have you been engaged in mining?—Seventeen years.

3. In what part of the country?—Chiefly in Northumberland.

4. Where are you now employed?—At Choppingtore colliery, in Northumberland.

5. Are children employed to any extent in the district in which you work? — Yes, there are something like 1,500, I should think, between 10 and 14 years of age.

6. Can you inform the Committee of the number of hours that the children of that age are employed generally in the mines in your neighbourhood?—They are engaged with their work 12 hours, and of course they are necessarily engaged a greater length of time than that; they are necessarily engaged from 14 to 15 hours in the day between leaving their houses and returning.

7. Do they come up at all during the period that they are at work, or do they remain under ground the whole of the period?—They remain under ground the whole of the time.

8. At what age do they generally begin work under ground?—Generally at 10.

9. Can you inform us to what extent they have been educated apparently when they are first employed; when they are 10 years old, to what extent do they appear to have been educated, as far as you know?—Generally their education is deficient.

10. Can they read at all at that period?—Most of them can.

11. Can they write?—Yes.

12. After they have begun their employment do you find that their education advances; do they improve themselves much? — Generally there are no facilities for that; it is only at night time that they have the chance of being educated, and in most collieries there is no provision made for it. In a few there is provision made, but in general from the length of hours of their employment they are so tired and fatigued that those who do go are found to sleep a considerable part of the time that they are at night schools.

13. Then, in your judgment, they do not improve their education after they take to working in the collieries?—It is only in very exceptional cases.

14. Do you know whether there is any general opinion prevailing amongst the workmen of your district as to the expediency of employing children so young?—The general impression is that they commence too early.

15. What is considered to be the age at which they might commence?—Opinions, of course, differ upon that point; do you ask for my opinion?

16. Yes, your opinion; and, as far as you know, the opinion of the workmen in your neighbourhood? — About 12 or 14, I should think; we consider that early enough.

17. If that be the opinion of the workmen, why is it that they let their children go into the collieries so young?—I do not know that that is the general opinion of them; but some of them, of course, are driven to it by heavy families, and such like.

18. What wages do the children of 10 years old get?—When they commence working they are generally paid 1 *s.* a day.

19. Is that money paid to the parents?—Yes.

20. Is it your opinion that they cannot resist the temptation of receiving the 1 *s.* a day?—Some of them cannot.

21. Is it ordinarily necessary that the parents should have this 1 *s.* a day for the sake of being able to live?—Not in general.

22. Is it your opinion that they could live without it?—For the most part they can.

23. What would be the character of the exceptional

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ceptional cases?—It sometimes happens that parents are disabled and out of health, and such like; and in cases of that sort, of course, there is necessarily poverty, and they are obliged to send their children to work at an early age.

24. With regard to children under the age of 12, who cannot obtain a certificate at the time when they are employed under the Act; are you aware that it is provided that they shall attend three hours a day for two days in each week?—I do not think that that is enforced in our district.

25. Have you heard whether in any one of the mines any special arrangement has been made to give those children a clear three hours a day for two days a week to enable them to be educated?—Never, to my knowledge.

26. Are you aware whether any of the children between 10 and 12 employed in the mines are employed without certificates, so as to render it necessary that they should attend a school for three hours two days in the week?—I cannot say positively that they do not get certificates; I think that they have not got them; I have never heard of any.

27. Do you know whether children under 10 are refused because they have not certificates; whether the rule has been to employ none but children who have certificates; do you know whether that is the case or not?—I cannot speak positively upon that point.

28. Mr. *Clive.*] Were you examined before the Act of 1860 was passed?—No.

29. You were not in town at all about it?—Never.

30. You are aware of that Act, the Mines Inspection Act?—Yes.

31. You know the second clause of it with respect to the education?—Yes.

32. Is it your opinion that those provisions are evaded, or not?—They are evaded, I think, in our district.

33. As far as you know, they are evaded?—As far as I know, they are.

34. Whose fault is it; do you think that it is the fault of the employers, or of the parents, or of both?—I should think of both.

35. Colonel *Dunne.*] At what age do you say that the children generally begin to work?—Mostly about 10.

36. Do they ever begin under 10?—Not to my knowledge.

37. You recommend that they should begin at 12 or 14?—Yes.

38. Which do you say, 12 or 14, because two years at that age makes a considerable difference?—I would say 14, merely taking my individual opinion.

39. But you are not quite certain that that is the opinion of the workmen?—No, I cannot say as to that.

40. Would not the opinion of the workmen depend upon the poverty of the workman's family whether he would consider that the children should begin at an earlier age than 14, or not?—Just so.

41. During the week, how many days are given for instruction, or are there any?—None.

42. The Act requires that there should be?—Yes.

43. But they do not give them?—Never.

44. You are not aware that a certificate has been given?—No; but I should think that most of the boys, if not all, who commence work in our district would be able to read and write, though imperfectly.

45. At the age of 10?—Yes.

46. Are the schools in the mines, or above ground?—Above ground.

47. After 14 hours' work a boy is expected to go to school at night?—Yes.

48. But is it not impossible for any boy to make any progress after 14 hours' work?—It is found to be impossible.

49. Mr. *Greenall.*] I think that you said that 1,500 children are employed in the district of which you speak?—Yes.

50. Do you know the number of adult colliers who are employed in that district?—About 5,000.

51. Then there would be 1,500 children to 5,000 adults?—Yes.

52. That would make 6,500 as the total of the two?—Yes.

53. Mr. *Hussey Vivian.*] Do you mean that the 1,500 children are between 10 and 14?—Yes.

54. In giving the adults, do you consider that all over 14 are adults?—Yes; I should think that we have about 6,000 adults, taking all above 14 to be adults.

55. Do you state those figures from any authority, or is it merely your own judgment?—We have some authority for a part of them at any rate, and of the others we just form a judgment.

56. What district do you speak of?—The county of Northumberland.

57. In the whole county of Northumberland, as I understand it, there are 7,500 persons employed in mines?—I would give that as about the mark, according to my opinion.

58. And of those 7,500, 1,500 are children between the ages of 10 and 14?—Just so.

59. Will you state how many there are between 10 and 11?—I cannot form a good idea of it.

60. What proportion can you give us?—I should think that above 500 would be between 10 and 11.

61. And what proportion between 11 and 12?—Perhaps 500 or 600; I could not say; I am just guessing at it.

62. Between 12 and 13, what number?—I cannot form anything like a correct opinion.

63. You have only a balance of 400 left?—Yes, but I am just guessing; I cannot give a correct notion at any rate.

64. It is a guess?—Yes, that is mere guess; I cannot give any statistics.

65. Does not the whole weight of your evidence very much turn upon the proportion which the children employed bear to the children of that age who are not employed?—Yes.

66. Is it not only under, as you have said, the pressing wants of the parents that children are employed at so early an age?—That is with respect to those who cannot read and write.

67. Are there not more children employed between 13 and 14 than between 12 and 13?—Yes, I should think that there are.

68. And are there not more between 12 and 13 than there are between 11 and 12?—It is very probable that there will be.

69. So that as a rule there are not a large number of children employed at so tender an age as 10?—Not just in our neighbourhood.

70. Can you speak as to any other neighbourhood

bourhood from your own knowledge?—No, I cannot.

71. You have said that children are employed underground for 12 hours?—Yes.

72. At what time do the children go underground?—From three to four in the morning.

73. When do the hewers go underground?—There are two shifts; one shift goes in at two generally, and the other shift at nine.

74. The children belonging to the shift which go in at two, go in you say at three?—Yes; there is not a uniform time of commencing at all the collieries in the county; some of the boys go down to commence work at four o'clock, and these are called on at three to be ready to go down at four; some go down at five o'clock, and these are called at four.

75. They go down the pit at four o'clock?—Yes, some at four.

76. The hewers have gone in at two, and the boys follow at four?—Yes, to go down to be at their places at that hour.

77. They are at the pit head at four o'clock?—They have to be at their places underground at that time.

78. How long do the hewers work?—Generally eight hours.

79. So that if they go down at two o'clock they come up again at 10 in the morning?—They leave their work at 10 and come up between 10 and 11.

80. How long do the boys belonging to that shift remain underground?—There is just one shift of boys for the two shifts of men.

81. The boys, I suppose, for the most part are engaged in putting the coals?—Yes.

82. Putting and driving the courses?—Yes.

83. When do the boys finish their work?—At from four to five o'clock in the evening.

84. Do none of the boys leave the pit before four or five o'clock?—None whatever, without going in earlier in the morning.

85. Those who have gone in at four in the morning leave at four in the evening?—Yes.

86. At what distance do they usually live from the colliery?—There is a great difference in that respect; some live perhaps within a mile, and some live as far as two miles from the colliery; and some nearer.

87. Some live close to the colliery?—Yes, within a quarter or half a mile.

88. Is it not the fact that generally the houses are built as near as possible to the colliery?—Mostly they are.

89. Then they would not be at the distance of a mile?—Most of them are not farther than a mile.

90. You have said that although the children are employed 12 hours, it is from 14 to 15 hours that they are absent from their homes?—Yes.

91. How do you account for the other two or three hours?—When I speak of it I speak from the time of their going out in the morning, being called an hour before the starting time, that is one hour; then I take from the time of their going out in the morning to the time of their returning and getting washed; I say that they are necessarily engaged from 14 to 15 hours in the day, that is from the time of their being called in the morning to the time that they get home and get washed and dressed, fit for the night school; I speak of the time that they are necessarily engaged.

92. You include in that the necessary time of dressing, and having their breakfast in the morning?—And washing and dressing afterwards.

93. Washing and dressing in the afternoon?—Yes.

94. That you include as part of the day's work?—Just so.

95. You have stated that they commence their work too early, is it not the fact that unless boys are trained early to the particular employment in which they are to be engaged, very great difficulties are encountered in rendering them fit for employment?—Yes, they are better if they have an early commencement, of course, so far as that is concerned.

96. Do the workmen, who are themselves in the receipt of good wages, generally employ their children at so early an age as 10?—I should think that they do; even those who have tolerable wages.

97. Are you able to state what proportion of the children in the whole district are so employed?—I am not.

98. It would follow from that, that almost all the workmen's children are employed at that early age?—From 10 to 12 is the general time.

99. The whole of the children belonging to the workmen of the district, or in great part, are employed at that age?—The great mass of them begin work at from 10 to 12 years of age.

100. Then you do not consider that those who are employed at that early age are, generally speaking, the children of parents who from illness or other causes, are in poor and embarrassed circumstances?—No; when I said that, I was speaking with reference to those who commence at 10 years of age, and are not able even to read and write.

101. What are the average wages of the colliers of your district?—They vary very considerably; from 4 *s.* to 5 *s.* a day is about the average.

102. They have frequently other members of their family earning wages, have they not; putters, and so on?—Yes, of course.

103. What are the wages of a putter?—From 2 *s.* to 3 *s.* per day, I should think.

104. What is the average age of a putter?—From 14 to 18.

105. Mr. *Bruce.*] You have stated that the wages which a boy can get at 10 years old are about 1 *s.* a day; those wages increase, I suppose, each year, do they not?—No, they do not raise by any fixed scale; they are taken to the first jobs, and their work is changed as they gain strength.

106. Between 12 and 14, what do they get?—About 1 *s.* 7 *d.* a day, generally.

107. Do you not think that it would be a very hard case where a parent had been injured, or where he was sickly, or where a father was dead, and there was only a mother, to prevent a child between 12 and 14 from earning 1 *s.* 7 *d.* a day for the good of his family?—Yes.

108. Are you prepared to recommend legislation which would prevent the employment of children underground between 12 and 14, whatever the state of their parents might be?—Of course there are exceptions to everything of that sort; it would be hard upon some, of course.

109. But you must lay down a general rule?—Yes.

110. You could not authorise the employment of children where the parents were ill, or where the

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the mother was a widow, in one case, and refuse it in the other. Are we to understand from you that you would, in all cases, prevent the employment of children underground up to the age of 14?—Yes.

111. I daresay that you are not aware that most of the inspectors of schools, whose opinions have been asked upon this matter, have reported that the effect of the Act of 1860, which requires a certificate to be given if a child is employed between 10 and 12, has been to prevent the employment of children before 12; you say that that is not the case in your district?—No.

112. They are employed between 10 and 12 just as much as they were before the Act was passed?—I cannot say for that; but they are employed between 10 and 12.

113. Why cannot you speak as to the difference between the time since 1860 and before 1860?—Of course, I should require to be prepared with something definite, some sort of numbers. The change has not been so great as to force itself upon my attention. I have not observed any great change.

114. Do you think that there has been any change since 1860 in the number of children employed between 10 and 12?—Not according to my observation.

115. Do you think that the legislation which you would ask for preventing the employment of children, is directed rather against the parents or against the employers; is it required more against the masters or against the parents?—It is required against both, I think.

116. You cannot say whether it is required against one more than against the other?—No; I can hardly answer that question.

117. Do you suppose that if it was proposed that no children should be employed before 14, the opposition to such a measure would come mostly from the masters, or mostly from the parents?—I do not think that either party would be very well satisfied with it, but I cannot say which would oppose it most.

118. Do you consider that the boys who are employed underground are generally less healthy than those who are employed above ground?—Generally, I think.

119. Is the work which they have to do hard?—Yes. At first the work which they have to do is not hard; when they commence work, say between 10 and 14.

120. We are speaking now of between 10 and 14?—The work is not exceedingly hard.

121. You have stated that a part of it consists in filling the trams with coal, are there not other employments underground in which boys are employed which are not so hard as that?—Yes; boys are not employed in doing that in our district.

122. Then what are the boys underground, between 10 and 14, employed in?—Chiefly in keeping doors and driving horses.

123. What proportion should you say are employed in keeping doors, and what proportion in driving horses?—I should think that there would be nine driving for every one that keeps a door as nearly as I can form an idea.

124. At what o'clock do these children between 10 and 14 usually go to bed?—At about, perhaps, eight or nine.

125. At what o'clock do they get up?—They usually get up at from three to four o'clock.

126. If they get up at three to four o'clock how can they possibly be at their work underground, as you have described it, at four o'clock?—As I have stated, there are two calling courses, there is not a uniform time of rising throughout the county. At some places the boys commence work at four o'clock, at others they commence at five o'clock. Where they commence working at four, they are called on at three to be at their work at four, and if they commence at five, they are called on at four to be at their work at five.

127. Are there any night schools in your neighbourhood?—Not many.

128. But there are some?—There are some.

129. Have you ever been at them?—Yes.

130. Have you seen any boys there of between 10 and 14?—Yes.

131. Have you seen many?—No, not many.

132. Are you able to say whether a boy of between 10 and 14, who attends at a night school after having been at work during the day, is able to give his attention to the work which he has to do at school?—I have never known any accidents happen to boys from want of sleep, and such like, in consequence of their having to attend the night school; but I have heard of their being so fatigued, and so on, while employed, that they have not been fit for their work, and that accidents have happened to them in consequence of it.

133. Have you heard that they fall asleep over their books; is not that the sort of accident which is most likely to happen?—That is the most general accident which happens.

134. Mr. *Kinnaird.*] Do you suppose that boys getting up at between four and five o'clock and working for the time which you have mentioned, can profit by the night schools?—They cannot, generally.

135. It is almost physically impossible that a boy of that age could have the strength to derive any benefit from school after that time?—Yes.

136. Is there any difference made in the working of boys in any of the mines with which you are connected, in order that they may go to school; do you know of any instances where the hours have been shortened specially to enable the boys to go to school?—No.

137. Does there appear to be any desire on the part of the employers that the boys should have such hours as to enable them to go to school?—No; the hours are never shortened for that purpose.

138. And therefore you think that some legal provision is necessary for that purpose?—Yes, to get the hours shortened.

139. You have said that some of the boys are keepers of doors?—Yes.

140. They cannot do anything else; they must be constantly at it?—They are tied there.

141. Is there not generally a very great draught every time you open a door and close it?—Yes, generally there is.

142. It is rather a trying thing to a boy of that age?—Yes.

143. It sounds a very easy thing, but it is, in fact, rather a painful one?—He is imprisoned there, just the same as if he was in a cell of a gaol.

144. And he can have nothing to take away from the imprisonment; he cannot read a book there?—No he is bound there; he must attend to the door.

145. And do nothing else?—Just so.

146. So

146. So that you consider it a very painful position for a lad of that age?—I do.

147. Mr. *Bruce.*] You have stated that the first turn finishes at nine?—If they commence work at two they finish at 10.

148. You have said that the second turn go in at nine?—Yes.

149. How long do they work?—They work till from four to five.

150. Have the boys to remain under ground until they have finished their turn?—Yes.

151. Mr. *Hussey Vivian.*] Are not these doors generally double doors?—No, not generally.

152. Are not main column doors generally double doors?—Yes, the main doors are generally double, but generally the doors are single.

153. Which the boys have to keep?—Just so.

154. Has not a boy a lamp when he is keeping a door?—Yes.

155. What is to prevent his reading?—Where I am now working there is not any explosive gas, and I cannot say whether a boy has a lamp or not; but when I kept a door if there was explosive gas or any danger, I had to keep it all day in the dark.

156. Is not that a rare state of things?—It is rare where we are.

157. Even where there is explosive gas in collieries, is it not rare?—Yes; it is just an exceptional case, but I have had to do it myself.

158. Whenever a boy is furnished with a lamp cannot he read?—Yes, he can read if he finds candles for himself.

159. Is not that the case with every man working underground?—Yes.

160. The boy can read if he has a light, can he not?—I suppose that he would be found fault with if he was discovered reading; he is there to mind his business; he has a duty to perform and he has to attend to it in the first place. I have never seen a boy reading, and I do not think that it would be allowed down the pit.

161. *Chairman.*] Can you state at what age this prolonged employment underground ceases; when does the time of employment begin to diminish?—Generally at perhaps about 18 to 21 years of age, when they get on to man's work; from 18 to perhaps 22.

162. Mr. *Bruce.*] When they begin to hew?—Yes, then the hours are shortened; it is harder work and the hours are shorter.

163. How does the going underground at 10 or 11 years of age make a man more skilled when he is employed in that work?—It does not at all make him more skilled at man's work; it makes him acquainted with the mine; he gradually comes on, and it makes him better acquainted with mining operations generally.

164. Supposing that a person is employed at 10 years of age, and that another is employed at 14, do you think that when they arrived at the age of 20 the one would be as skilled as the other in the business of the mine?—Yes, the one who began at 14 would in all probability be equally as efficient when he came to be 20 as if he had commenced at 10.

165. When the youths arrive at the age of 17 or 18, do you know what their condition is now since the Act has been in force as regards education; have they kept up their knowledge of reading and writing, or are they generally youths without any knowledge?—Their education is very defective indeed; I believe that most of them are able barely to read and write, but that would be all, I think.

166. Do you find that young men of 17 or 18 are in the habit of reading for their amusement or instruction in their leisure hours?—Very seldom.

167. When their hours of work diminish, do many of them take any means to improve their education, and acquire a facility of reading and writing?—Not generally.

168. Then, what are their pursuits and amusements when they become young men?—They have various games; those who are about 16 and so on generally have games, and they just play about, and some of them get on to drinking, and such like; they spend their time in various ways, just according to their inclinations.

169. Is there a disposition on the part of the young men to gamble in games?—Generally, there is.

170. Is it the general practice of these youths to play for money, and to gamble?—Yes, that is a general practice.

171. Is it your opinion that the play is carried on more for the money and for the gambling than for the amusement and sport of the game?—I do not know what to say to that. In some of their games of course there is not any sport to lead them to desire to play at them except for the money, and it must be for the money, but in other games there is skill; many of them play just for the game, and not for money.

172. Mr. *Greenall.*] Are you able to say whether the colliers deposit much money in the savings' banks?—I cannot speak positively to that, but I should think not, in general.

173. Do they avail themselves of the building societies; are many of them owners of cottages?—Not many of them.

174. Mr. *Hussey Vivian.*] Supposing that an enactment were passed preventing the employment of children under the age of 14, would it not be probable that children would seek employment, or that the parents of children would seek employment for their children in other directions, for instance, in manufactories?—Not generally, I think; some, of course, might do so.

175. You think that the love which they entertain for the particular employment of a collier would so far outweigh their feeling for the 6*s.* a week that they would keep their children, up to 14, in order to employ them in collieries?—It is not so much for the love of the employment as for the difficulty of getting them into other situations.

176. You are speaking as regards your own district?—Just so.

177. Can you imagine the case of a district in which there is plenty of employment for children in manufactories, such, for instance, as the district of Newcastle, where there are various manufactories; do you not think that the tendency would be for the children of colliers to seek employment in those manufactories?—Yes; in districts of that sort I should think that it would be.

178. Mr. *Bruce.*] You have said that between the ages of 14 and 16, and between the ages of 16 and 18, very few of the lads engaged in collieries endeavour to improve themselves by reading and study?—Very few, indeed.

179. Do you know many boys in other classes of work who live by their daily labour?—No, I do

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I do not mix up much with other classes of working men; I have been generally in the heart of the coal district.

180. Are you able to say whether the majority of the boys of between 12 and 18, who are agricultural labourers, or who are employed generally in the manufactories of the country, devote much of their time to reading and self improvement?—I am not able to say; I have not had much connection with them.

181. You cannot say whether the colliers are worse than the others in that respect?—No; I cannot say that.

182. Mr. *Clive.*] You are a hewer?—Yes.

183. At what age did you go underground yourself?—I went down at 10.

184. Have you kept up your education?—Yes; I think that I know a little bit more than I did when I began.

185. Then it did not affect your education?—It affected me, of course.

186. Has it affected your health in any way?—I cannot say that.

187. I understand you to say that you would prohibit all labour underground up to the age of 14?—Yes.

188. What, in your opinion, would the parents do with their children, if they were prevented from going underground; do you think that they would put them to other work, or would let them be idle?—If they could get them to other work, profitably, I believe that they would generally do it.

189. Colonel *Dunne.*] Do you think that the health of the children has been at all injured by beginning to work too early?—Yes, I think that it has been.

190. What has been the effect in your observation; have they been weaker than other children?—After they have been in the mine for some time they can be distinguished by their complexions, and such like, from those who are above ground; and I just judge from that.

191. Do you think that the atmosphere of the mine is a close one, or is as healthy as the upper air?—It is not so healthy as the upper air.

192. *Chairman.*] Can you tell us whether sending children underground so very young has any effect in making them callous and reckless in their conduct in the mines, or do you think that they would be more careful if they were sent underground at a later age?—I think that they would be more careful if they were sent underground at a later age.

193. Do not a great many of the accidents arise from the carelessness of the men?—Partly from that, of course.

194. Do you think that the character of the man would be improved if they went underground later, and with more education?—I do.

195. You think that they would be more careful?—Yes.

196. I suppose that you can read and write easily?—Yes.

197. Could you read and write easily when you first went underground?—I could read and write.

198. Did you afterwards take any pains to improve your education?—Yes.

199. In what manner?—Not until I became a coal hewer. I was not just in the same position as regards that when I commenced coal hewing as when I left off boy's work; but I saw the necessity of improving my mind, and after I became a hewer I set to and did the best I could.

200. When you were only employed eight hours underground you found leisure to improve yourself, and took advantage of it?—Just so.

201. Supposing that boys were permitted to go underground before 14, do you think that it would be an advantage if their time underground were limited to that of the hewers?—I think so.

202. Is there any practical objection to the time of the labour of the children underground being limited to that of a grown-up person?—It would be found to be difficult to let boys work a shorter length of hours than 12, provided all the others were working 12 hours; if the pit went for 12 hours, it would be found difficult, if not impracticable, for a boy to be taken away at the end of eight hours and to undergo a course of education.

203. Would it be impossible to arrange that the children should go down for the same periods as the hewers and the grown-up people?—No; I think that it would be possible.

204. But it would require more boys?—Just so.

205. With regard to the necessity for people employing their children at this early age, are the wages of colliers sufficient to enable them to subscribe to societies for the purpose of providing for their wives and children, if they choose?—Most of them are connected with societies, and so on, and make provision for that.

206. But, in the case of accidents, or of a parent being killed, do they make any provision for their children?—No; not generally.

207. Mr. *Bruce.*] If the boys were allowed to work short turns, the same time as the men, would you still insist upon 14 years of age as the age below which they should not be allowed to go down?—No; that would modify my views upon that subject.

208. To what extent?—I would then let them go down at 12.

209. At what age have you ever known men enter collieries as hewers, who have not been underground before?—A few cases of that sort have come under my own observation, of men commencing to work as coal hewers who had not been trained to the pits.

210. Do you find them more careful than those who have been trained?—They have not the same experience; they may be more cautious; but, of course, they have not the same practical knowledge, and therefore there have been cases of accidents happening to men in our neighbourhood, who have been just commencing in the pits, when they have arrived at bad air; and we have had men killed the first day that they were down the pit, owing to their want of knowledge of pit working, and such like.

211. Mr. *Kinnaird.*] Should you say that the collieries, generally, improve their education; have you any instances of men who have, since they began to work, greatly improved their education, or do they not rather go back, and lose any advantage which they may have gained?—They generally become worse; they do not improve; they acquire bad habits; they get on to drinking and gambling, and such like, and they go completely to wreck.

212. Mr. *Bruce.*] Is that habit of not improving themselves after they leave school peculiar to colliers?

colliers?—I do not know, but I should think not.

213. *Chairman.*] With regard to the employment of women, are women employed in your district?—No; we have not any women, either about the pits or underground.

214. Neither above ground nor underground?—Just so.

215. You find that business goes on perfectly well without them?—Better without them than with them, I should think.

216. So that there are none connected with the works?—None, whatever.

217. Mr. *Kinnaird.*] How long has it been the case that no women have been employed?—I have never known them employed since I commenced working in the pits.

218. Mr. *Clive.*] What is the thinnest seam which you have?—We have seams below 30 inches in the neighbourhood in which I live.

219. How are they worked?—The men just go about on their hands and knees, and do the best they can; it is a wretched affair when it is like that.

220. *Chairman.*] Are you well acquainted with the rules prescribed in the Act which was passed in 1860 for working mines?—I have a general knowledge of them; I have read them.

221. Are the workmen in your district satisfied with those rules, or have they any objections to them?—With regard to the first rule respecting ventilation, they would have it to read, so that all available places in the mine should be ventilated; all accessible places.

222. You want it extended to all accessible places?—Yes.

223. Have you experienced or do you know of any inconveniences arising in your district from the limitation of this rule to the working places?—None have come under my own observation; but I have heard of accidents happening through boys and men going into parts which were not sufficiently ventilated.

224. You will observe that the second rule provides that places which contain gases shall be properly fenced off?—Yes; but accidents have happened through gas accumulating, and coming out in parts, and that would be obviated if all accessible places were ventilated.

225. Will you go on to the next rule?—That rule is satisfactory.

226. Just go through the rules, and stop at any rule upon which you have anything to say?—These rules are generally satisfactory to the men.

227. With the exception which you have mentioned, you have no objection to offer to these rules?—No.

228. Mr. *Bruce.*] The second rule states that "all entrances to any place not in actual course of working and extensions, and suspected to contain dangerous gas of any kind, shall be properly fenced off, so as to prevent access thereto?"—Yes.

229. If that rule is complied with these places cease to be accessible?—Yes.

230. But do you say that you would still ventilate them on account of the noxious gases which would be generated in them?—If they are not accessible, of course they need not be ventilated.

231. Does not the Act make it imperative that they should be made inaccessible?—Yes.

232. Then why do you think that it is necessary to introduce the words, that all accessible places shall be ventilated; are not the words sufficiently large that all working places shall be ventilated?—Yes; if that is carried out in its integrity it is sufficient.

233. As far as your experience goes, is it not carried out?—As I have stated before, there is not any amount of explosive gas in the mine in which I work, so that we never anticipate any danger from that cause.

234. You speak rather from the information which you have received as to the practice in other collieries than from your own observation?—Yes, in that case. If you would allow me, I should like to state that our men complained very much of the bad ventilation of the collieries, where there is not any amount of explosive gas; the ventilation is so bad in general that the men can scarcely breathe; they are quite unfit for employment of any kind after they have been for a length of time in connection with their work; indeed, just at the part of the mine where I am working, men have been obliged to leave their employment, and come home in consequence of that; they have suffered from headache, and have been quite out of order; some of them have been out of work for weeks, just in consequence of the bad state of the ventilation where there is not explosive gas.

235. The words in the Act are, "Noxious gases"?—Just so.

236. They may be injurious to health, though not liable to explosion?—Just so.

237. And you say that in the collieries with which you are acquainted, the amount of ventilation which is introduced is not sufficient to render them harmless?—Yes.

238. In those cases have you complained to the inspector?—Not to the inspector.

239. To whom have you complained?—To the viewer, the captain of the colliery, and such like.

240. Have your objections been attended to?—Yes; in some cases they have made improvements at the time, but, in fact, you must be always complaining to get things set right; the great majority of the men do not like to be always complaining as a matter of course.

241. What can be done beyond the present Act; the present Act says that an adequate ventilation shall be constantly employed, not only where there are explosive gases, but where there are noxious gases; what more would you do; the present law is sufficient, but it appears to be disregarded; what security would you take for having it better observed?—In general, in the pit in which I am working, although the ventilation is good, that is to say, there is plenty of air generally in the main courses, yet pains are not taken to get air into the workings, where the men are working. In the main headways, as we call them, the air is generally good, and there is generally a pretty good current of air, but it is found to be defective where the men work; and I would make it compulsory on the part of the masters in that case where the air was not good, either to shorten what we call the pillars, that is to say, the distance which we work up the places, or to put brattices at the end of the places.

242. *Chairman.*] You will observe that the rule is that "an adequate amount of ventilation shall be constantly produced in all coal mines or collieries, and brimstone mines, to dilute and render harmless noxious gases to such an extent,

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that the working places of the pits, levels, and workings of every such colliery and line, and the travelling roads to and from such working-places, shall under ordinary circumstances, be in a fit state for working and passing them"?—Yes.

243. That being already enacted, can you suggest any mode of legislation by which more can be done in that respect for the health of the men?—I could not alter that so as to improve it in that respect, but it is not enforced, that is where the difficulty is.

244. Mr. *Liddell.*] You are experienced as a practical miner; is there not a difficulty, almost amounting to an impossibility, in creating a free current of air in side workings, at particular stages of working the coal. You have spoken of the headways; they are ventilated with great facility; but is there not a practical difficulty, almost amounting to an impossibility, in creating a free ventilation in such places as I am now attempting to describe?—Yes, in some cases.

245. The men, I presume, know that well?—Yes.

246. And they would not expect an impossibility?—Where it is impossible of course they would not expect it.

247. You have admitted that in the headways, for the most part, the ventilation is pretty perfect?—I was then speaking of the colliery in which I am working. I am informed that in a neighbouring colliery the ventilation generally is in a defective state; it is a very extensive colliery; there are two pits about a mile separate from each other, and after the air has aired one pit, and has gone its course in that pit, it travels to the men in the other pit; and in the other pit the ventilation, I suppose, is in a wretched state.

248. You are speaking from hearsay?—Yes.

249. To what pit are you now alluding?—I am alluding to the Bedlington collieries.

250. But you are not practically acquainted with the interior of the Bedlington collieries?—No.

251. Mr. *Kinnaird.*] Why do you not apply to the inspector?—To tell the truth, there are many men who are timid on that point; there have been cases of men being sacrificed and losing their employment in consequence of applying to the inspector.

252. Do you mean to say that if a man complains to the inspector of the ventilation, or the state of the mine, he is liable to be discharged by his employer?—Yes.

253. If he should be discharged from his employment in that mine, is it very easy to get employment in another mine?—Sometimes it is difficult.

254. Why; is he a marked man for having complained to the inspector?—Yes.

255. And he finds it difficult to get employment in another mine?—Yes.

256. Mr. *Clive.*] What you really want is more regular inspection, is it not?—Just so.

257. You want sub-inspectors?—Yes.

258. There are not inspectors enough?—No; in the neighbourhood in which I live it is a very rare thing for an inspector to be seen; I have never seen him myself.

259. Will you look at Rule 3: "Whenever safety lamps are required to be used they shall be first examined and securely locked by a person or persons duly authorised for this purpose"?—Yes.

260. Would you see any objection to leaving out that portion, "Whenever safety lamps are required," and enacting that there shall always be safety lamps; that no other lamp shall be used but a safety lamp, and that candles shall be altogether prohibited?—That would not do.

261. *Chairman.*] Why would it not do?—In many cases the safety lamps are not needed at all; there is no explosive gas in many of the mines, and of course there is little light from the safety lamps and they are locked. The men have to blast and fire shots, and such like, and it would never do to make safety lamps compulsory.

262. There would be no use in having a safety lamp where people were exploding gunpowder, I suppose?—Not a bit; I have seen it there, but it seems a sort of mockery.

263. Mr. *Bruce.*] You said, in answer to a question put to you just now, that it was not so much that the rules were in fault as the application of the rules?—Just so.

264. And that what you wanted was more frequent inspection, and more inspectors?—Yes.

265. What would be the use of having more inspectors if the men do not dare to appeal to them, for fear of being turned away?—That implies that the inspector never comes to a colliery except when he is sent for.

266. You would not have him there weekly, I presume?—I would not like to define how often he should come, but I think that he should come sometimes without being sent for.

267. *Chairman.*] With regard to the special rules for a colliery, which are required under the Act, have you the rules relating to the mine in which you are employed?—I have a copy here in connection with the neighbouring mine, and they are all about alike; there is not a great deal of difference.

268. Have the workmen, to your knowledge, any opinion to offer with regard to those rules?—Those rules are generally satisfactory as rules.

269. There is no objection made on the part of the workmen in your district to the character of the special rules?—No. With respect to the weighing, the men think that when they have the choice of the man who is appointed to weigh on the pit heaps, and when they pay him, they should have the power of placing any man there that they think fit; but the Act does not give them that power.

270. But that is not under a special rule?—No.

271. Does any inconvenience arise in the working of the mines in your neighbourhood from the employment of unskilled workmen?—They are not extensively employed in our district; it is rather a rare case, so that we do not suffer a great deal from that.

272. With regard to the overman and the fireman, and other supervising men, has any inconvenience arisen from any want of skill on their part in directing the operations of the mine?—I think that the harm which is done in that respect is more of an indirect nature, such that it is difficult to trace it. For instance, in the case of ventilation, although there is not explosive gas in the mine, a skilled man would undoubtedly be far superior to an unskilled one in adopting means for the better ventilation of a colliery like that. We suffer very much from bad ventilation; but, to my personal knowledge, no serious accidents have happened from it.

273. The

273. The men do not suffer in any way, to your knowledge, in your immediate district, from the want of skill on the part of those who supervise them?—No, excepting in an indirect way.

274. With regard to the inspection, do you think that the mines in your neighbourhood are sufficiently inspected to insure a compliance with the provisions of the Act?—No; they are not inspected at all.

275. With regard to the mine in which you are employed, when was it last inspected?—I cannot give the date, but the inspector has just been once down the pit, and it has been going seven years.

276. What is the opinion of the people in the district generally, so far as you know, as regards the inspection; do they think that it is often enough?—It is not often enough; there are not a sufficient number of inspectors; that is their opinion.

277. Is it their opinion that, in consequence of the inconveniences to which they are exposed if they make complaints themselves, it would be desirable that the inspectors should come oftener?—Yes, and without being sent for.

278. So that the men should not be exposed to dismissal for making complaints to the inspector?—Just so.

279. Mr. *Bruce*.] Do you think that it would be possible for Government to have a system of inspection so general as to enable them to find out themselves all the defects in the colliery without the assistance of any information given by the men themselves?—I think that there would be better information from men who are working in the colliery.

280. But do you think that it would be possible for Government to maintain such an army of inspectors as would be necessary to do all that you want them to do, without information from the men?—No, I should think that it would be next to impossible, without their receiving any information from the workmen.

281. How frequently, in your opinion, ought a colliery to be inspected by a Government official?—I would give it as my personal opinion, that it should be inspected once in six months, or so.

282. Do you think that that would be sufficient to enable him to discover the defects of ventilation in the more remote parts of the colliery?—Yes. I think that if there was a thorough inspection once in six months, it would tend to keep things right as regards ventilation, and such like.

283. What increase in the number of inspectors, so far as your district is concerned, do you think that that would necessitate?—I should think that if we had three or four more inspectors in Northumberland it would be sufficient.

284. Do you think that if there were three or four more, the inspectors could thoroughly examine every colliery twice a year?—Yes, I think so; that is to say, in Northumberland.

285. Do you not think that the effect of having these inspectors examining the collieries so frequently, would be to shift the responsibility of supplying proper ventilation from the owners of the collieries to the Government officials?—No, I do not think that; I think that they should make it their business to enforce the Acts which are already in existence.

286. Do you think that it is the duty of the Government in every trade and occupation to see that the works are carried on in a manner suited to secure the greatest health and safety of the workmen?—Yes, in dangerous occupations I should think so.

287. Mr. *Liddell*.] You have stated that men are liable occasionally (we hope not often), to dismissal for making complaints to the inspectors?—Yes.

288. Of your own knowledge do you know of any instance in which that has occurred?—Not to my own personal knowledge.

289. You cannot state any particular pit, or the name of any particular man, to whom it has occurred?—No, I cannot.

290. You have heard that it has occurred?—Yes.

291. And you believe that it has occurred?—Yes.

292. But you cannot, of your own knowledge, state particulars in any way?—No.

293. You have given a great deal of attention to the matter of this inquiry, and you seem very competent to give an opinion, and I want to ask your opinion upon another point; you wish to have a class of sub-inspectors appointed?—Yes.

294. When you speak of sub-inspectors do you mean men at a less salary, and of an inferior stamp to the present inspectors?—I would not have them inferior, if you could get them otherwise.

295. Do you merely want more inspectors, or do you want a lower class of man as an inspector?—A man who would knock about and see that things were kept right; a man who would not be afraid of himself.

296. I think you have stated that men do not suffer from any want of skill on the part of those who supervise them?—No, not excepting in an indirect way on our part; as I have said before, we are generally free from explosive gases and things of that sort, which are extremely dangerous.

297. If you obtained your wish in getting an inferior class of inspectors appointed, do you think that there would be no danger that the men might suffer from the want of skill in those respects; you admit that you now do not suffer from the want of skill in the inspectors, but at the same time you wish an inferior class of men to be appointed as inspectors; I want to know whether you do not think that there is some danger, that if you appoint an inferior class of men as sub-inspectors, who will knock about as you say, and go into things thoroughly, the men may suffer from the want of skill of that inferior class?—I think not; I think that the Government would see after that, and have proper men in that position.

298. *Chairman*.] You want a class of men who would look into all the details of the mine, and would go into all the holes and corners of the mine, and go into the real facts, so as to ascertain whether the thing was right or wrong?—Just so.

299. They would report to the chief inspector, who would then bring his scientific knowledge to bear upon the facts which they stated?—Yes.

300. You do not want a person of the same theoretical and scientific knowledge, merely for the purpose of seeing whether the facts in the mine are right or wrong?—No; not of such an extraordinarily high stamp.

301. Mr. *Greenall*.] Do you mean to say that a sub-inspector, in your opinion, ought to be a man who has worked himself in the district?—I would

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would not say that. I would not say that he should be a man who has worked, but I should say that he should be a man who has a practical acquaintance with mining.

302. Then he must have worked in order to have a practical acquaintance, must he not?—No; I mean an acquaintance with the ventilation and such like.

303. *Chairman.*] And with the arrangements of a mine?—Yes.

304. Mr. *Liddell.*] Do you think that the ordinary class of viewer would be competent to discharge the duties of a sub-inspector?—I think so, if you could be fortunate enough to get one who would act impartially. I should think that his competence would be unquestionable.

305. Mr. *Kinnaird.*] You have said something with regard to adding to the number of inspectors. Do you not think that if the manner of inspection was different, we might, perhaps, obtain the same end?—I believe that there are defects in that also.

306. Do you not think that if the inspector, instead of making a formal visit, went down without notice, and then had an opportunity of conversing with the men in the mine, he would arrive at facts which he does not at the present moment ascertain?—Yes, that is wanted.

307. You want the inspector to come without any formal visit?—Just so.

308. And to ascertain from the men themselves the mischiefs in that particular mine?—Just so.

309. Do you not think that if the inspector now did his duty he might arrive at the same information?—I think that he has too much work; even if he were doing his best and were in every way qualified for it, I think that it would require more than he could do.

310. *Chairman.*] How long would it take to inspect all the workings, and places, and every part of the mine in which you are employed?—I should think that it would take eight hours or more; that is just according to my judgment; that is to say to go through it thoroughly.

311. Mr. *Kinnaird.*] I believe that there are different rules for working in different mines, are there not?—They do not vary much in our district in Northumberland.

312. But you have heard that in other mines they do differ considerably?—Yes; they differ somewhat.

313. *Chairman.*] With regard to the weighing of the material, are the workmen of your district satisfied with the present provision of the Act of 1860?—They are satisfied with everything, except that they think that when they are allowed the privilege of employing a man as the check weighman, they ought to have the power of putting any man on whom they think proper when they pay him.

314. In what way are they prevented from employing a person of their own choice?—If the masters do not approve of the man whom they choose, the masters have the power of putting him aside.

315. The masters can discharge a man from their employment so that he then cannot be employed by the workmen?—Yes.

316. Do you know any case in which after a man has been chosen by the workmen, he being at the time in the employ of the master, the master has refused to continue the employment of that man for the purpose of weighing?—To my knowledge no case has happened in my neighbourhood, but I know of an instance in the county of Durham where that was the case.

317. Are all coals delivered by weight in your district, or by measure?—By weight.

318. Is the weight of the men's work carried forward throughout the day?—Yes.

319. You are quite satisfied with the system of weighing?—Yes.

320. Mr. *Bruce.*] The workmen now have the power of appointing a man to be present at the weighing, provided he be in the employment of the coalowner?—Yes.

321. Is that what you object to?—Yes; the want of power to put a man whether he be in the employment of the masters or not.

322. You say that you do not know of your own knowledge of any case where the masters have evaded the Act by turning off the weigher, and so preventing a person in his employment from occupying that post, but that you have heard of a case?—Yes.

323. In that case did the men employ a second workman as weigher?—I cannot answer that question.

324. You cannot say whether the masters repeated the operation, and got rid of him a second time?—No, I cannot say that; they objected to the man, not to the men having the power of placing a man in that position; they would allow another man to be placed there, but the man became obnoxious to the masters and they turned him off.

325. Do you know why he became obnoxious?—Yes.

326. Why?—It was for taking a part in a trade's union.

327. Would you prevent a man from the possibility of being turned out of the employment of the coalowner, because he occupied the post of weigher. Would you hold that a man who had been once selected by the men to be a weigher should from that time be sacred, and that whatever he might do he could not be turned off by the master?—If he behaved badly I would have him turned off; that is to say, if he were guilty of dishonesty or anything of that sort.

328. Mr. *Kinnaird.*] What is the weight in Northumberland?—Where I work, the weight of the tub is about 10 cwt.

329. Does not it vary in some other parts?—Yes; there are some larger, and some smaller.

330. Would it not be well if the inspector had a control of the weighing?—Yes.

331. Why has not he?—I think that he has not the power.

332. He has no power by law in that respect?—I understand not.

333. You think it desirable that that should be one of the things which he should inspect and report upon?—Yes.

334. Mr. *Bruce.*] Do you think that it would be possible to have constantly at the pit's mouth, a man over whom the coalowner had no sort of control?—I would not say that.

335. Is not that what you proposed, namely, to employ a person who is not in the employment of the coalowner?—I think that he should give a sufficient reason before he turns a man off.

336. Who is to be the judge of the sufficiency of the reason; can you suggest an answer to that question?—I cannot give a satisfactory answer.

337. Mr. *Liddell.*] No doubt you have read the petition of the miners of Northumberland and Durham;

Durham; I see that they wish that "true" weighing machines should be placed on every pit bank in the kingdom; are there any weighing machines which are untrue and fallacious?—Not that I know of.

338. Then, you do not know what the meaning of that word "true," as applied to weighing machines, is; is there a necessity for the epithet? I suppose that it must be necessary.

339. Have you ever heard any complaints made that the weighing machines were not true?—I have.

340. That they were not just; that they did not accurately do what they professed to do?—Yes, I have heard of that.

341. You do not know any such case of your own knowledge?—No.

342. *Chairman.*] What we understand you to want is that the workmen should have the right of selecting a weigher, and paying him themselves?—Just so.

343. And that if he misbehaved himself, the master should be at liberty to remove him?—Yes, if he acted dishonestly and such like, of course the master should have the power of removing him.

344. Colonel *Dunne.*] Would it not be better to let the inspector have the power of dismissal, he being an impartial person?—Yes, he would be impartial.

345. Mr. *Greenall.*] I think that you have said that in the district in which you labour, you yourself are perfectly satisfied with the system of weighing?—Yes.

346. Have you ever known any dissatisfaction arising from the use of weights which have not been inspected, or have you any idea in your mind that weights which are not legal are ever used?—I have not any idea that they are.

347. You speak with perfect confidence and satisfaction upon the system of weighing in your district?—Yes, just where I am.

348. And you do not know of any places where there has been any dissatisfaction?—Not to my own knowledge.

349. Mr. *Liddell.*] If an untrue set of weights were used, the practical experience of a pitman would very soon tell him that they were untrue, would it not?—Yes, he would find it out directly I should think.

350. Supposing that such a case occurred, he would address his complaint, I suppose in the first instance, to the overman?—Yes, I suppose so.

351. And the duty of the overman would be to represent it to the master?—Yes.

352. Do you believe, in your experience, that there is any master who would not immediately see that that state of things was remedied, but would go on cheating his workmen?—I do not know any who would not have it remedied; I have a better opinion of the masters; I think that they would remedy it immediately.

353. *Chairman.*] Is trucking carried on to any extent in the district in which you work?—No; there is nothing of that.

354. Are any drinking shops kept in the neighbourhood of the pay places in your district?—No, not close at hand.

355. Or in connection with them?—No.

356. Do any of the masters in your district keep any drinking shops, or are they connected with them?—No.

357. For what period of time are the wages kept back in your district?—We are paid fortnightly.

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358. Do the workmen suffer any inconvenience from that; or is it found to be a convenient period?—It is quite satisfactory.

359. Is anything advanced to the men on account, or is the whole fortnight's pay retained?—The whole fortnight's pay is kept.

360. With regard to coroner's inquests in your district, have the workmen confidence in the proceedings at those inquests when accidents occur?—No; they have not.

361. Why not?—Chiefly because the men who are generally chosen are men who know nothing whatever about the mines, and such like.

362. The coroner's constable summons a jury, does he not?—Yes.

363. That is your impression?—I understand so.

364. Are not workmen summoned upon the jury?—Never, but as witnesses, to my knowledge.

365. Are any persons connected with mines summoned at all upon the juries?—I think not.

366. Who are the people who are generally summoned upon these juries?—Generally tradesmen in the neighbourhood.

367. Are viewers or overmen, or any persons of that sort, ever summoned?—Not to my knowledge, except as witnesses.

368. Are the tradesmen considered impartial between the masters and the workmen?—Generally I should think that they would be considered impartial; but from their circumstances they are sometimes liable to be influenced by their employers.

369. Whom do you call the employers of the tradesmen?—I mean the owners of the works.

370. The employers of the men?—Yes.

371. Why should they be more under the influence of the employers of the men than of the workmen who deal with them?—They are generally men who have no knowledge, and can scarcely understand the witnesses who are called before them, and the terms which are used, and such like.

372. Is the objection on account of the want of knowledge of the jurymen, or on account of their being under the influence of particular persons?—From the want of knowledge generally.

373. Would you have the jury composed of persons who had been employed in mining?—Yes, partly.

374. Do the verdicts which have been given at these inquests generally give satisfaction to the workmen, or the reverse?—Generally the reverse.

375. Do you think that the verdicts are not in accordance with the evidence which is given as to the causes of the accidents, or what is the objection to the verdict?—That is what they think; they think that the verdict is not in accordance with the evidence given generally.

376. At every inquest is not the inspector present?—Yes, I understand so.

377. And does not he take part in the inquiry?—I think that he does.

378. Mr. *Bruce.*] One great object in summoning a jury is, to have an impartial one, is it not?—Yes, I should think so.

379. Do you think that the juries would be impartial if they were composed to a considerable extent of workmen?—I cannot see any motive which the workmen would have to act partially; that is to say,

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say, if a part of the jury were workmen: they necessarily have a better knowledge of the operations in connection with the mine, and such like.

380. You do not think that there would be a tendency on the part of the workmen to return unfairly severe verdicts?—No, I think not.

381. Mr. *Liddell.*] You think that questions may arise in the course of these inquiries which a body of tradesmen cannot possibly be in a position to judge of properly?—Just so.

382. And you would like to see some practical professional skill brought to bear in ascertaining the facts?—Yes.

383. With respect to the pay, are you satisfied with the fortnightly mode of payment?—Yes.

384. Supposing that there is sickness in your family, and you want money in the course of the fortnight, can a workman, upon application at the office, receive an instalment of pay, if it is required?—I think not; but in a case like that I do not think that there would be much difficulty; in fact, there is no inconvenience felt from that: most of the overmen, or viewers, would forward money of their own rather than see a man suffer; there is no inconvenience felt from that.

385. Mr. *Greenall.*] Have you ever yourself been present at an inquest?—Never.

386. Have you ever heard upon any occasion of the inspector who is generally or always present at an inquest interfering in any way?—No, I have not.

387. Mr. *Liddell.*] Do you not think that if it was the practice to summon two or three highly intelligent men, such as viewers or head overmen, upon the coroner's juries, it would give satisfaction to the men, and would give them confidence in the finding of a jury more than they possess at present?—No, I do not think that it would.

388. Then am I to understand that you are quite satisfied with the finding of the coroner's jury in all cases?—No.

389. Then why do you say that the summoning of two or three highly intelligent men, such as viewers or head overmen, would not increase the confidence?—Of course it would be difficult to find impartial men, they would necessarily have some interest at stake. They would of course have knowledge enough.

390. Then, in your mind, the objection to summoning practical men is, that they may be partial?—Yes.

391. Then no improved method of empannelling these juries occurs to your mind at present. You do not see your way to keeping up the impartiality of the jury, and at the same time bringing practical skill to bear upon the investigation?—It would, of course, be difficult, but the men would have more confidence if they found a jury composed of ordinary workmen in connection with the colliery.

392. Mr. *Bruce.*] Do you think that the masters would have more confidence in that case; would they not feel very much towards the workmen, as I gather from your evidence you feel towards the viewers, namely, that there would be partiality?—For myself, I could have confidence in a good many viewers; they would perhaps often differ.

393. You would have confidence in a great many whose personal honesty you knew?—Yes; just according to what I have seen.

394. But taking them as a class, would you like to see them upon juries?—Of course when a man has an interest at stake, there is that to begin with.

395. *Chairman.*] What interest has a viewer in another mine, wholly disconnected with the master of the mine where the accident has occurred?—He has no pecuniary interest, but he may be on friendly terms, and that sometimes influences a man.

396. Mr. *Bruce.*] Has he not a class interest with the master?—Yes.

397. And have not the workmen a class interest with the workmen?—A little bit of it.

398. Do you not think that it would be an improvement if, instead of choosing the jury from the immediate neighbourhood, you went a little further from home to select them?—Yes, I think that it would be an advantage in some cases.

399. *Chairman.*] Are you required to enter into any contract in your district upon going to a mine?—We have a monthly agreement between our masters and ourselves.

400. Is it in one form throughout the district?—Yes, throughout Northumberland.

401. Is that form satisfactory to the men?—Yes.

402. Have you anything else which you wish to suggest for the consideration of the Committee?—I think not.

403. Can you state what is the average amount which is spent by the colliers in exciting drinks out of their wages?—I cannot form any idea.

404. Are there many temperance men employed in the collieries in your neighbourhood?—No, they are rather scarce.

405. Mr. *Bruce.*] What is the average rent of the houses?—The colliers in Northumberland do not pay house rent.

406. Do all the houses belong to the masters?—Yes; they allow so much house rent, if they have not houses sufficient for the men; they generally allow 4*l.* a year house rent to the men who have to hire houses.

407. *Chairman.*] What do other people pay for houses like those which you live in?—About, perhaps 4*l.* a year.

408. If they take them by the week, how much do they pay?—I cannot exactly say.

409. Can you give us an idea at all of the extent of the money which is spent weekly by a miner in drink; what is his consumption of drink generally?—I cannot form an idea upon that point. I cannot give an approximation to the truth.

410. Mr. *Liddell.*] A sober man spends very little, and a drunken man spends a good deal?—Just so.

411. *Chairman.*] What do you call a sober man; what does a steady man spend in drink?—I can hardly tell; you are puzzling me now. That is rather critical ground; it is hard to define what a sober man is, and how much he will spend.

412. Mr. *Liddell.*] Do the pitmen, as a rule, lay by much money in savings' banks?—Not as a rule; not generally.

413. Of course there are instances to the contrary?—Yes, where men save a little.

414. *Chairman.*] In all cases, do they work 5½ days in the week, or how many days?—When the trade is brisk they work 11 days in the fortnight, six days in one week and five in another; and the Saturday is looked upon as sacred, that is the day after the pay.

415. Then

415. Then no work is done at all on the Saturday once a fortnight?—No.

416. How do they employ that Saturday?—Variously; some take trips away, and some spend their time in the neighbourhood; some spend the whole of their day in drinking and gambling, and such like.

417. Is there much tendency in your district to enjoy that Saturday in feasting of an expensive character?—No, I should think not.

418. They do not drink champagne in your district on that Saturday?—No, they are not champagne men.

419. Do they indulge in an expensive dinner on that Saturday?—No, I daresay not; they go in for beer; that is to say, those who go to excess.

420. After that Saturday, on the following Monday, do they generally resume work?—Mostly; the greater part of them.

421. Are we to understand that in your district there is no Monday given up to idleness and drinking?—No, not the Monday.

422. It is only upon the one Saturday every fortnight that they enjoy themselves?—Yes; after the pay there is a holiday. Mr. *T. Burt.* 14 June 1865.

423. Do they generally subscribe to some societies to provide against accidents and other things?—Yes, mostly.

424. What is the amount of subscription which they have to give weekly?—Generally, about 6*d.* weekly; that is about the usual thing; it is 6*d.* fortnightly, in some cases.

425. A man earning 4*s.* a day can save a good deal, if he chooses?—No; it will depend much upon his circumstances as regards family, and so on; a young man can save if he has 4*s.* a day; but if a man has a family, I should think that it would take about 4*s.* a day to keep them decently.

426. Mr. *Liddell.*] Are not a great many of your pitmen very fond of their gardens?—Some of them are.

427. Do not some of them go in a great deal for flower shows?—Yes, that is a hobby.

428. Do not a great many of them do so?—Yes.

Mr. WILLIAM CRAWFORD, called in; and Examined.

429. *Chairman.*] WHAT is your employment?—I am a Miner. Mr. *W. Crawford.*

430. In what particular branch of work?—Coal hewing.

431. Where are you employed?—In Northumberland.

432. How long have you been employed in Northumberland?—Nineteen years.

433. Did you begin your employment there?—Yes.

434. At what age did you first begin working?—At about 10 years of age.

435. You have heard the evidence of the last witness?—Yes.

436. Have you made any inquiries yourself as to the employment of children of 10 years of age and under 14 in your district?—Not as to the exact number.

437. But have you made inquiries as to the general extent to which they are employed?—No, I cannot say the exact number; but they are extensively engaged at that age.

438. At what age do they generally begin work?—At from 10 to 12.

439. Is it rather at 10 or at 12 that they begin?—I should think from my experience of the district, at about 11 on the average.

440. What is the condition of the children generally, when they begin work; are they children with certificates, or without certificates?—I only know one colliery where certificates are given.

441. Do you mean that you only know one colliery where the children are sufficiently educated to obtain certificates?—I only know one colliery where the employers demand certificates.

442. Mr. *Bruce.*] That is if the children are between 10 and 12?—Yes.

443. *Chairman.*] But are they not compelled to demand them?—By law they are; but I am not aware that they are demanded by the employers.

444. Then is it your opinion, that this provision of the Act, as to requiring certificates, is not generally carried out in the collieries?—It is not carried out.

445. What is your opinion of the extent of the education of the children between 10 and 12, when they are first employed, can they read and write?—Many of them at the age of eight or 10 can read and write, but very badly at that age; and at the age of 10, their employment has a depressing influence on their nature, and the consequence is, that what they have received, they lose in a short time.

446. You think that they go back in education after they begin to work in the colliery?—Most certainly.

447. Have you had any opportunity of observing the condition of youths who are aged about 16 or 17?—Yes.

448. Do you find that they can read and write easily, or that they have lost the power of reading and writing which they formerly possessed?—We find this in the district, that at the age of 16 or 17, reading and writing are altogether unknown to many of them, from the meagre education which they receive in their youth; no taste is given for reading, and consequently they lose what they have got.

449. They have not acquired a facility of reading for their own enjoyment, and therefore the habit drops off altogether?—Yes.

450. And by the time that they are 16 or 17 many of them are practically unable to read and write?—Many of them are.

451. Do you concur in what has been stated with reference to the long period of time during which children under 14 are employed in connection with the collieries, namely, for 14 hours?—Yes.

452. Will you state exactly what your knowledge is upon that subject?—They are down the pit from 12½ to 13 hours per day, but many of them are necessarily engaged in each day from 14 or 15 hours; and there are exceptional cases where they are engaged even more than that; as a rule they run on 15 hours a day.

453. Has that the effect of preventing them altogether from getting any improvement or amusement or instruction of any sort during the day?—Most certainly.

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454. Colonel *Dunne.*] Do they make any attempt of the kind by having schools at night?—There are a few collieries where night schools are held, and perhaps at those collieries a few boys do go to those schools; but they are so physically exhausted that it is to no purpose that they go there.

455. *Chairman.*] Are you aware of any of the children being employed under the second provision of the Educational Clause of the Mining Act, as to attending at school three hours a day for two days in the week?—The difficulty in the Act is, that reading and writing only are named; but to what extent is not named. Now it may be that they can perhaps read out of the spelling book, or say their A, B, C, and that that may be considered sufficient; no extent is named, and perhaps one and all can do that.

456. I am calling your attention to the second part of the clause where the children have no certificate of their being able to read and write; do you know whether there are any children employed who attend three hours a day for two days in the week to learn?—I do not know one.

457. You do not know of any arrangements of that sort under this clause?—None.

458. Do you think that it is possible to make any arrangement for young children to work in the mine, and at the same time, at some other period of the week to improve their education?—They could do it by working alternate days.

459. Do you think that that would be the most practicable mode of enabling children to work, and to be educated?—Yes.

460. What is your opinion as to the lowest age at which a child might be employed in a mine without injury to himself?—The lowest age is 12, and for two years more I would restrict the hours of labour.

461. To what extent would you restrict the hours of labour of boys between 12 and 14?—There is a little difference of opinion in the matter.

462. What is your opinion?—I think that they should not be more than eight hours per day in the mine.

463. Do you mean eight hours actually underground at work?—Yes.

464. Supposing that an alternate day were given, would you then allow the day to be longer than eight hours, or do you think that after eight hours it is injurious to the child?—That is a question which it is difficult to answer.

465. Do you think that if an alternate day were given up to education the child, without injury to himself, might be at work longer than eight hours on the day when he went down the mine?—Yes, working on alternate days he might work longer than that.

466. Do you think that the prolonged work of these very young children in the mine has any effect upon them in making them reckless in their conduct afterwards?—Yes.

467. Do you think that if they began work at a later age they would be more careful in mining operations, and that there would be less cases of injury and explosion?—Yes.

468. Mr. *Bruce.*] Do you think that if they were prevented from going to work between 10 and 14 they would spend that time at school?—If provision were made for their going to school they would.

469. Do you mean if there were schools in the neighbourhood?—Yes.

470. Do you mean to say that the parents would not employ them in some remunerative work instead of sending them to school?—I speak only of our district; in that district there are no privileges of the kind, and they cannot do that.

471. There are no employments above ground, where they might be set to work?—No.

472. It has been my duty to inquire into this matter, and I have made inquiries of the inspectors of schools, and they have told me generally that within their districts the effect of this Act of which we are speaking has been to prevent children from being employed before they are 12 years old, as the masters do not choose to give themselves any trouble about the certificates. At the same time they tell me that they cannot make out that there has been any increase in the number of children at school; so that whilst the children are prevented from being employed underground it appears that they do not go to school; what do you suppose becomes of them?—That information does not apply to Northumberland; there is only one school in the county, at least in our district, which miners' children attend where the inspectors attend.

473. Mr. *Liddell.*] You mean that the colliery schools of Northumberland as a rule are not inspected schools?—Yes.

474. Mr. *Bruce.*] Do you state that of the whole of Northumberland?—In our district.

475. Are there many schools in your district?—About 23 or 24.

476. Out of those 23 or 24 schools, do you mean to say that there is only one inspected by a Government Inspector?—Only one that I am aware of.

477. Do you know what the reason of that is?—I do not know, and cannot say.

478. *Chairman.*] Are these schools maintained by the workmen?—In a few cases each workman subscribes so much fortnightly; but in the majority of cases they are voluntarily supported.

479. Mr. *Bruce.*] The district of which you speak is the district in the neighbourhood of Morpeth, is it not?—Yes; Morpeth and the south of it.

480. You say that at night schools the children who have been underground for 12 hours are too physically exhausted to profit by the instruction. Have you attended the night schools?—Yes.

481. Have you seen children of between 10 and 14 who have been underground learning there?—Yes.

482. You have therefore had opportunities of observing their condition?—Yes.

483. Will you tell us what you have observed?—We have generally found that they have been so languid and so physically exhausted that to give their minds to either reading or to arithmetic was a matter altogether impossible.

484. You say that, as the Act only provides that the certificate should give the assurance that the boy is able to read and write, it may be evaded, and that a certificate may be given if there is the lowest possible degree of reading and writing. Have you ever known a certificate given under those circumstances?—No.

485. Do you not suppose that every honest schoolmaster would interpret the Act to mean reading and writing sufficiently well?—I do not know.

486. Would you like to see a certain standard of reading and writing fixed?—Not only a standard

dard of reading and writing, but also of arithmetic.

487. You would like to see a certain standard of reading, writing, and arithmetic fixed?—Yes.

488. As to the age, I did not understand you distinctly to say whether or not you agreed with the last witness, that you would altogether prohibit the employment of children up to 14?—I would prohibit it up to 12.

489. And between 12 and 14 you would allow work to go on, on alternate days, or for a limited number of hours?—Yes.

490. Mr. *Liddell.*] I wish to know a little more with respect to these colliery schools; you are personally acquainted with many of these schools, are you not?—Yes.

491. Are they mostly under masters or mistresses?—Masters.

492. The men subscribe so much fortnightly; how much?—There are three places where that is done; the men subscribe 6 *d.* per fortnight, and the boys 3 *d.* in those places.

493. That is for the school?—Yes.

494. Supposing that I am a pitman, and that I subscribe 6 *d.* a fortnight, have I a right to send any number that I please of my own children to that school?—Yes.

495. And that covers the payment for the whole?—Yes.

496. You have said something about the boys subscribing?—Yes.

497. How much do they subscribe?—Threepence a fortnight.

498. And that only entitles that particular boy to attend that school?—Yes.

499. Do you know how much the salary of the master amounts to in most of these schools?—Of course that varies at various collieries.

500. Who are the persons that set these schools going; are they the owners of the collieries, and the lessees, and so on?—The workmen and the employers generally work together at those places.

501. Are these schools looked upon in the light of adventure schools; does the master take the school, and make the most out of it that he can?—No; for the government of the school there is a committee, and part of that committee consists of the employers, and part of the workmen, and there is a fund to which all this money goes.

502. You do not know what the salary of the master generally amounts to?—No.

503. Can you state the lowest amount which you know, or the highest?—I do not know it.

504. From your knowledge of these schools is the instruction which is given in them good or bad?—In the daytime they perhaps receive instruction very well. At one colliery, which I know, there are three different schools; a boys' school, a girls' school, and an infant school; but there are other places where one single master has too much work, and cannot attend to it.

505. You have said that in the day schools, for the most part, you think that the instruction is pretty good, do you distinguish them from the night schools; is the instruction in the night schools not well given?—No, if we distinguish those collieries where they subscribe so much per fortnight, from those where the education is voluntary; in the latter case a master wishes to have as many scholars as he can get, and he frequently has too many.

506. Am I to understand you that, in those collieries where the subscriptions to the schools are voluntary, the instruction given is not so good as where there is a fixed payment?—Yes, I believe that it is not so good where the subscriptions are voluntary.

507. Those are more in the nature of adventure schools, I presume?—Yes.

508. They are probably undertaken by the master on his own account?—Yes.

509. To get the most pupils that he can, and to make the most money?—Yes.

510. And you give the preference to the other class of school?—Yes; but a great many men object to it, because if I have no children I must pay; every man must pay.

511. Mr. *Bruce.*] Am I to understand you that, in your part of the country, all the men pay 6 *d.* a fortnight towards the schooling only?—Not all of them; at particular collieries that is done.

512. At the colliery at which you work, for instance, is it done?—At the present time I am not working at a colliery at all.

513. At the collieries at which you have worked, was any payment made?—No.

514. Whenever any payment is deducted on account of schooling, is it always at the rate of 6 *d.* a fortnight?—That is the uniform rate in our county.

515. Is it applied simply to the expenses of the school, and to no other purpose?—Yes.

516. It does not go towards the doctors or the sick fund, or anything else?—No.

517. *Chairman.*] Is any account rendered to the collieries of the expenditure of the 6 *d.*?—At most of the collieries there is.

518. An annual statement is made up of the total expenses, and it is sent to the collieries?—Yes.

519. Is that generally satisfactory?—So far as the expenditure goes, it is.

520. Is the fund generally sufficient to cover the whole expense of the school, or does the owner of the colliery contribute largely?—It entirely covers all expenses.

521. Mr. *Liddell.*] You have said that between the ages of 12 and 14 you should like the children either to work three days a week, or to work half-time every day, in order that they should attend school?—Yes.

522. Do you think that the masters would like that arrangement; do you think that they would consent to it?—I do not know.

523. Do you think that the parents would like it?—The question is not what the parents would like, but what ought to be.

524. Do you think that the parents, as a rule, would like it?—A number of improvident parents would not like it, and a great number of them would; but while they would not like it, their children would be benefited.

525. You would compel them all to do so?—Yes.

526. *Chairman.*] Do the collieries in your district maintain the parents when they are sick or injured, or is there any practice of resorting to the parish for relief?—There is a practice of this sort: if a person meets with an accident he receives for a certain time from the colliery owners 5 *s.* a week, and many of them are on sick clubs, and receive from them also; but the parish is very seldom applied to.

527. Do the men who have aged parents support them, if they are unable to support themselves?—There are some cases where they do maintain

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maintain their parents, and in some cases the parents go to the workhouse.

528. Have you any complaints to make with reference to the rules under the Act of 1860?—The first general rule we think ought to have in it, that all gases ought to be rendered harmless in all accessible places. The second rule apparently makes provision for that, but it reads that all entrances to places of this kind must be stopped up if they are suspected, but only if they are suspected.

529. Do you think that the danger arises from places which are not suspected, but are not being worked?—The danger arises from the gas being there at all.

530. And therefore you think that these places should be ventilated?—Yes, I may say that about four years ago we lost in our district about 70 men; an explosion took place; the gas was standing in the old workings; it came out upon the men who were working in the mine, and about 70 men and boys lost their lives; it clearly arose from that circumstance.

531. Would it not entail very great expense if all these old workings were kept ventilated?—Yes, expense might be incurred, but life would be at the same time protected.

532. Would it be necessary to ventilate them if they were effectually and altogether shut off from the workings?—If they could be shut off that might do, but in my opinion it is impracticable.

533. Why is it impracticable?—The roof so often falls in, and the barrier between the old workings and the working places, would be so often taken out, that it could not possibly be done. You are always working the mine further out and out.

534. Still why could not an old working be completely stopped up, and shut out; if it fell in it would only shut it out tighter?—Yes, but it would close in, and over the roof of it it would fall in, and the gas might escape.

535. Your complaint is, that the places which are not being worked, and are not suspected, become causes of danger?—Yes.

536. And that they ought therefore to be ventilated?—Yes.

537. Are there any of the other rules which are complained of by the workmen as insufficient?—No, there are not any of the others which are particularly objectionable.

538. Mr. *Bruce.*] You would not be satisfied by any amount of walling off of these old workings which are not being worked; but you would have them all thoroughly ventilated, whatever their extent might be?—If they could be securely walled that would do.

539. But I understand you to express the opinion that they cannot be securely walled?—An opinion, but only an opinion.

540. Would you be content if it were put in the Act of Parliament that they should not only be fenced, but securely walled?—Yes, that would do.

541. You would have it that they should all be either securely walled or thoroughly ventilated?—Yes, that would do.

542. Have you worked much in the Northumberland collieries?—I have worked in them, but not much.

543. In some of the collieries there must be a vast amount of old workings?—Yes.

544. And the expense of ventilating, of course, is very considerable?—Yes.

545. Do you think that in some cases the profits of the colliery would admit of the whole of the works being thoroughly ventilated?—In many cases; and in fact, in every case their present profits would be lessened, but, however expensive, it being to secure life, it ought to be done.

546. Mr. *Liddell.*] It would be less expensive, I presume, in almost every case where the old workings were of any extent at all, to wall them off, rather than to keep them in a thorough state of ventilation?—I could not say.

547. In one of your answers you said that, however securely they are walled off, the roof is so constantly in the habit of falling in that it creates what I should imagine to be a displacement of the gas, which must find an exit in some way or another; is that what you wish to convey?—No.

548. How does it occur, by the falling in of the roof, supposing it to be securely walled off, that the gas gets into the other part of the pit?—If it is walled off, and the roof falls on each side of the wall, it creates that effect.

549. Colonel *Dunne.*] Do you conceive that an increase in the number of inspectors would be an advantage?—Yes.

550. Do you not think that if they came at uncertain times, and visited more frequently, the inspection would be sufficient for them to make observations?—Yes.

551. They would, of course, obtain information in addition to that?—Yes.

552. And that would be what you propose?—Yes.

553. Mr. *Kinnaird.*] Have the inspectors at present much communication with the people themselves who are working in the mines; do they seek to get information from the miners themselves, as to any complaints which they may have?—I do not know one single instance of it.

554. Colonel *Dunne.*] Of what class are inspectors; are they men acquainted with mines, or men merely chosen because it is wished to give them the appointment?—We believe that many of them are fitted for the office which they are now filling, but in the district to which I belong, we have one old man more than 70 years of age to inspect more than 130 collieries.

555. And he is utterly unequal to it?—Altogether.

556. Do you not think that men acquainted with a mine, though of no very high education, but with practical knowledge, would be quite sufficient?—Even those under inspectors, I think, ought to be examined.

557. To insure qualifications?—Yes.

558. Do you think that the first inspectors are qualified?—I do not know any but our own inspector, and I would undoubtedly disqualify him.

559. Are there any sub-inspectors under him?—No, he is all in himself.

560. But you recommend that sub-inspectors should be appointed?—Yes.

561. They would be practical men, having a knowledge of collieries, without having any higher knowledge and education?—Yes; if they were a superior kind of miners, they might do.

562. *Chairman.*] Would a man who was capable of being a viewer, be qualified to be a sub-inspector?—Yes.

563. He would be able to see and to appreciate all

all the defects of the mine, and of the workings underground, and would report to the chief inspector anything which he thought deficient?—Yes.

564. And you would have the chief inspector then examine them?—Yes.

565. Have you heard any complaints of the fencing, or of the rails, as they now stand, being so inefficient that persons go into some places, and so incur danger?—If there is gas in one part of the mine, there is put up between it and the working places, a small piece of board, and there is marked upon it "Gas," but it is not fenced off.

566. Mr. *Bruce.*] It is not fenced off, so as to prevent people going to it?—No.

567. It is a simple notice?—Yes.

568. And you do not think that that is a proper fencing off within the meaning of the Act?—No.

569. *Chairman.*] Do you think that the workmen suffer from any want of skill in the viewers and overmen, and the persons who direct their labour?—We believe that they suffer more, and especially indirectly, from the viewers and overmen not knowing the nature of the gases and the air amongst which the workmen have to work.

570. And that is a consequence, the men are suffered to work in unwholesome air?—Yes, frequently.

571. Have you known men suffer much from continually working in air which is not wholesome?—Yes; I have suffered personally, in fact, some time ago.

572. Mr. *Bruce.*] I suppose that the men suffer most in collieries where the gas is not explosive?—As a rule, they will; there is less caution taken.

573. *Chairman.*] Do you think that it is desirable to extend the compulsory use of safety lamps?—No, not the compulsory use of them in every mine.

574. Why should not they be compulsory in every case where the mine is subject to explosive gases?—Where it is subject to explosive gases they ought to be used, and are, I think; but there are mines where they can work with safety without them.

575. With regard to the weighing of the coal under the Act of 1860, are the men satisfied with the present state of the law?—No.

576. What is their objection to the present law?—They wish to take out of that clause the provision contained in it, that the owner has the power to object to a man of their own choosing, if that man is not one of their own workmen. More than that, they wish the weights with which their coals are weighed to be imperial standard weights, and to give the power to the inspector of mines, or to the inspector of weights and measures, to come there at any moment and inspect the machine, as they do in every other case; we have known cases; in fact, two cases are known to myself, where the men suspected very much that the weighing machine was unjust; they have sent to the inspector of weights and measures, and he has refused to come for a very long time, and before he has come, he has sent word to the owners that he was coming.

577. Are we to understand that these weights and scales are not considered to be within the supervision of the ordinary inspectors of weights and scales?—They are not.

578. Are not all the weights which are used imperial weights, or some multiple of an imperial weight?—There is a fear that sometimes they are not, and no person can inspect them at the present time.

579. Have you any grievance with respect to the evasion of the Truck Acts?—There is a portion of the Mine Inspection Act to which I should wish to refer before we come to that; I wish to go into the 17th section of the Act.

580. Have you any complaint to make with reference to the 17th section of the Act?—Yes.

581. Will you state it to the Committee?—At the present time, if the inspector of mines finds a part of the mine unfit to work in, he has to report it to the mine owner and the Home Secretary. After doing that, there is given to the owner 20 days to look over the matter; at the end of the 20 days he has the power to refuse making any alteration in the mine; but, when he refuses, the mine owner writes to the Home Secretary, at the same time nominating five mining engineers, and from those five engineers named by the mine owner himself, the Home Secretary appoints one, I think, as arbitrator, or appoints arbitrators from them; now we think that in that case the mine owner virtually appoints his own arbitrator, and that the power ought to be in the hands of at least the inspector, to appoint directly a person as arbitrator in such a case.

582. Mr. *Bruce.*] The inspector is the Government?—Yes.

583. *Chairman.*] Your objection is to the mine owner nominating five persons, so as practically to compel the Secretary of State to nominate one of the friends of the mine owner?—Yes; and the 20 days being allowed to elapse before that time.

584. You think that the time is too great?—Yes.

585. Mr. *Bruce.*] Have you known any unfair results from that provision?—It carries, on the face of it, some injustice.

586. But have you known or heard of any unfair results, or is this a merely speculative objection?—I do not know any special case where it has been so.

587. Do you think that if the Home Secretary, acting on the advice of the inspector, were to choose some out of these five mining engineers, there would be any fear of these men making partial and unjust decisions; the Home Secretary, by the advice probably of the inspector, selects some out of the five mining engineers named to him, in order to conduct the inquiry; do you think that, under those circumstances, the inspector having authorised the selection of the mining engineers, there is any great danger of a partial decision?—Most certainly there is, in my opinion; because the mine owner himself, and not the inspector, nominates the five mining engineers.

588. Then you have a very poor opinion of the integrity of mining engineers?—It is, most certainly, unjust and inequitable.

589. Do not mining engineers possess a sort of public character, and do not you think that they are above making such a partial decision as you apprehend?—I do not wish to answer such a question as that with respect to the personal character of those men. I believe that in many cases they would act very partially indeed, and that it ought not to be in their hands to do so, where men's lives are at stake.

590. You think that the men selected by the inspector would be more likely to arrive at a just

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judgment? — Not being himself an interested person he would look to men who in his opinion would act impartially in the case.

591. *Chairman.*] You think that the power of the mine owners always to appoint the engineers in these cases has a prejudicial effect over the engineers?—Yes.

592. Mr. *Liddell.*] Is that prejudicial effect in idea, or is it a practical effect; can you state a case of your own knowledge in which that prejudicial effect has been produced?—No.

593. Then it is rather the idea which is conveyed to the minds of the workmen by the power given to the mine owner to appoint his own engineers, than any case which has come under your own knowledge, which gives rise to the opinion which you have expressed?—Yes.

594. Mr. *Bruce.*] The Act provides that none of these five mining engineers from whom the selection is to be made "shall be interested in, or employed in the management of such mine or colliery"?—Yes.

595. Mr. *Liddell.*] You have stated a case within your own knowledge of a weighing machine which was distrusted by the workmen, and you have said that the inspector was asked to inspect it; that he delayed a long time in coming, but that he did come at last, having given notice to the owner of the mine of his coming. Do you remember what was the result of his examination of that machine?—After he came to the colliery, if I am not mistaken, he never made an examination of the machine; he came there, but for some reason or another he did not do it. The pit at that time was about being altogether done, and it is done now.

596. So that that machine has ceased to exist at any rate now?—Yes. Another case of that kind took place in the vicinity of Newcastle, where the question which arose was whether the inspector of mines or the inspector of weights and measures ought to adjust a weighing machine. I cannot say how it was decided, but we think that it ought to be specific in the Act.

597. Is it your own opinion that the machines which are untrue have got out of order, or that they are really fallacious, and that the weights are false?—Some of them may be, but we think that the inspector of weights and measures ought to have the power to go there regularly and adjust those machines, and make them all right, the same as the weights in a grocer's shop.

598. Do the workmen believe that these weights are deliberately and intentionally falsified, or that it is the result in most cases of an accident?—They have no power to ascertain that fact.

599. Mr. *Greenall.*] You express it as your opinion that it would be much more satisfactory if the weights were inspected by the inspector of weights and measures?—Yes.

600. *Chairman.*] You would treat it as a part of his duty, the same as in the case of a shop, or any other place where things were sold by weight?—Yes.

601. Is it perfectly satisfactory to the men in your district that they are paid by weight?—Yes.

602. I understand that in your district the paying by measure has been altogether given up?—Yes.

Monday, 19*th March* 1866.

MEMBERS PRESENT:

Mr. Bromley.
Mr. Bruce.
Sir Philip Egerton.
Mr. Fawcett.
Mr. Wm. Orme Foster.
Mr. Greenall.
Mr. Kinnaird.
Mr. Neate.
Mr. Woods.

CHARLES NEATE, Esq., in the Chair.

Mr. PETER DICKINSON, called in; and Examined.

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603. *Chairman.*] WHERE do you come from?—I live in Aspull.

604. Where is that?—Near Wigan.

605. What are you?—A working miner.

606. Have you always worked in Lancashire?—With the exception of some three months.

607. At what time did you begin working?—Between eight and nine years of age.

608. How long ago is that?—Twenty-three years ago.

609. With the little exception of which you have spoken, you have worked in the Lancashire coal mines ever since?—Yes.

610. Are there many children about the age of 10 or 12 employed there?—There are.

611. What mine are you now working in?—I am working in the Arley mine.

612. Is that a large mine?—It varies; but I should say, taking it as a rule, it would be 3 feet 10 or 4 feet in height.

613. Is it an extensive pit?—Yes, very extensive.

614. How many men are employed in the special pit in which you work?—I should say 120.

615. How many boys are employed?—There must be 60 or 70, I should think.

616. That is to say, nearly half as many boys as men?—Yes.

617. What is the age at which those boys begin to work?—We take them up at 10 years of age. I am not aware of any going into that pit under 10.

618. Have you noticed any difference as to the age at which boys have been taken during the last five years?—I have not.

619. You are aware, perhaps, that there was an alteration made in the law about that length of time ago?—I am.

620. Do you know what that alteration was?—I believe I know something of it, but perhaps I do not altogether know what it was.

621. Was it generally known among the workers in the mines what the alteration in the law was?—No, it was not.

622. So far as regards the age at which children might be employed, you mean?—Yes.

623. You have not noticed that in consequence of that Act, or since that time, there has been any marked difference in the ages at which children have been employed?—No.

624. Are you aware what the state of the law is as to children taken in between the ages of 10 and 12?—The law is, that they should be able to read and write.

625. Is that attended to?—As a general thing it is not.

626. It is sometimes attended to, is it?—There are exceptions.

627. Which should you say was the exception—is it more often attended to, or more often not attended to?—The majority can neither read nor write.

628. Do you know what the law is as to certificates?—The children should produce a certificate, I believe, from a competent schoolmaster, if under the age of 12 years—between 10 and 12.

629. So far as you have seen in the mines where you have worked, is that regulation complied with?—In the mine where I work at present, I do not think they will take a boy in under 10; but after they have taken him in, I do not think they ever inquire, between the ages of 10 and 12, whether he goes to school or not.

630. But can you say whether the children working between 10 and 12 obtain a certificate?—Some do.

631. Have you ever seen boys with that certificate?—No.

632. You say that there are about 60 or 70 boys employed at your pit; you mean boys of all ages, I suppose?—Boys of all ages, from 10 to 16 or 17.

633. How many of those 60 or 70 boys would be between 10 and 12 years of age?—Perhaps 20; I do not speak definitely, for I am not acquainted with them all.

634. Whose children are those boys mostly?—Chiefly of miners and men connected with the mines.

635. What do you mean by "men connected with the mines"?—Banks men and such men.

636. What is the feeling among the men themselves about the employment of the children?—They

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They look on it in different lights, but the general sense is that they should not be employed under 12.

637. No child that has a father is employed without the consent of his father, I suppose?—No; but there are numbers without fathers, and they go to form a precedent for others.

638. Are there any parish boys, that is to say, any coming from the unions?—There are some men who get boys from the unions to draw for them.

639. Is that down in the mines?—Down in the mines.

640. Have you known that?—Yes.

641. You mean to say that union boys are put out to work in that way?—Yes.

642. Do those union boys bring a certificate?—I cannot say.

643. Do you know whether they can read or write?—I cannot say; but, judging from the place that they have been in, they would be better able to read and write, I should say, than ordinary boys.

644. Are there any women employed underground in the mines?—Not underground.

645. They are employed above ground?—Yes.

646. What are they employed to do?—Not in pulling the tubs out of the cages, but in putting the empty ones in, and in other work.

647. Who are these women that are employed?—Colliers' wives, and daughters, and widows.

648. What is the feeling among the working miners as to the employment of the women?—I think that they generally condemn it.

649. What objection do you see to it?—I think it is degrading to the sex.

650. There is a peculiarity of dress, is not there?—Yes.

651. It is rather a man's dress that they wear, is it not?—It is rather a man's dress; and I believe, in some cases, it drowns all sense of decency betwixt men and women, they resemble one another so much.

652. Do the women smoke?—Some do.

653. And I suppose it is dirty work, is it not, which they do?—Very dirty.

654. They get black and grimy?—As black as those who are down in the mines.

655. Sir *Philip Egerton.*] For how many hours in a day do the boys work in the mines?—From 11 to 14, between going and coming home.

656. Is that consecutive work, or have they time allowed for meals?—The day wage boys, that is to say, the boys immediately employed by the masters, have meal times.

657. How long?—The general rule is half an hour for breakfast, and an hour for dinner, but it is very often curtailed.

658. What wages do they get for a day's work?—From 1 *s.* to 2 *s.* 6 *d.*

659. Is that the case with boys between 10 and 12 years of age?—No; between 10 and 16.

660. Between 10 and 12, what are their wages?—From 1 *s.* to 1 *s.* 4 *d.*

661. Mr. *Bromley.*] Do you consider, from your own knowledge, that the grossest immorality takes place in consequence of the dress and occupation of the women of whom you have spoken?—I do.

662. Mr. *Woods.*] I do not think you have told the Committee for whom you work?—The Wigan Coal and Iron Company, limited.

663. As to the women, you have said that they wear a peculiar dress, is that necessary to enable them to do their work?—I believe it is.

664. Will you be kind enough to describe to the Committee the peculiarities of their dress?—I will do so as well as I can. They have breeches, but not made of the same shape as these which I have on; they fasten round the waist without braces; they have no stays on; they have a petticoat, but it is tucked up behind, in this way —(*describing the same*)—and they have a soft bonnet.

665. What have they on their shoulders?—A man's jacket if it is wet; if it is fair, nothing in the summer.

666. With regard to the kind of work that they do above ground, will you describe that more fully to the Committee?—Running the tubs from the pit's mouth to the boats or the waggons, or screens, or anything like that.

667. Would you say that filling waggons or boats with a spade was a considerable portion of their occupation?—In some cases; there are some women set apart wholly for the pit's banks.

668. You said, I think, that the general feeling was that the labour of women in connection with mines was prejudicial, would you point out to the Committee in what way you think it is more prejudicial than any other kind of labour done by women?—I think I did point that out to the Committee.

669. Comparing it, for instance, with labour in the field, in connection with farm work, or any other kind of work, is it degrading—(that was the word, I think, which you used) by reason of the dress they wear, or from the nature of the employment?—The nature of the employment, and the conversation generally going on on the pit's bank are calculated to degrade the mind.

670. Is there any more intercourse between the men and the women above the surface of the ground, and any more conversation than in other trades where men and women work together above ground?—I believe there is more lewd language used.

671. As to the boys, you said, I think, that the boys who went into the pits were mainly the children of persons who either did work in the pits, or were connected with that trade?—Yes.

672. With regard to the hours for which those boys work, you said it was from 10 to 13 hours, I think; is that every day in the week?—It may vary; some days a little less, and some days more.

673. What is the system by which collier boys grow into colliers; are they apprenticed, or how is it that a man becomes a collier in your neighbourhood?—He engages as a drawer. I have a boy at present who is one, and when he comes to manhood he will start colliering. I started it myself.

674. May he start when he pleases?—Yes, whenever he thinks he can better himself.

675. By whom are the boys employed generally in your neighbourhood; who is their master, the owner of the colliery, or the workman?—The workman.

676. Then it would be found, generally speaking, would it not, that boys are the servants of their parents or their connections?—Yes.

677. The system of pay in your neighbourhood is, that the workman is paid by the master of the colliery, and the workman makes the bargain with the drawer; is that correct?—Yes.

678. Mr.

678. Mr. *Foster.*] As to the dress of the women, I suppose it is the most convenient dress for the kind of work that they do?—Yes.

679. The entire person of the woman is covered, and there is nothing indecent in the dress, though you spoke of the dress as being one of the leading features of the degrading character of the employment?—It clothes the person, but it does not drown the feeling.

680. That is simply an idea, I suppose. It is not of course a similar dress to what you generally see women wearing?—No.

681. But for the kind of employment, it is a convenient dress, you say?—Yes.

682. And that is the reason why it is adopted?—That is the reason why it is adopted, I believe.

683. Have you ever had any knowledge of factories?—No.

684. You know, probably, that women are extensively employed in factories?—Yes.

685. Could you give us any comparison with regard to the relative degree of morality between that of the women employed out of doors on mine banks, and that of the women employed in factories?—I do not know that I can.

686. Do you think that the morality of the women employed about pits, will bear a favourable comparison with that of the girls and females employed in factories?—I do not think it will bear a favourable comparison, but a man that has worked in the pit from eight years of age, as I have, does not know much of any other branch of business.

687. Mr. *Greenall.*] Do you remember the time when women were employed underground?—Yes.

688. Do they wear the same dress now as they wore then?—Exactly, only except what we term a backgown.

689. With regard to the breeches of which you speak, were not they used down below by the women because they drew the tubs?—Yes.

690. And they drew them in a very unpleasant way, astride a chain, did they not?—Not in my district, but there are places where they did draw them so.

691. Do you know whether it was not in consequence of that work of drawing astride a chain that breeches were used?—I do not think it was because of that, for I have never seen any chains or any of that work in my life.

692. What is the age of your drawer?—He is going into his sixteenth year.

693. How long have you had him?—For about 15 months.

694. Can he read and write?—Yes.

695. Did you ask him the question before you engaged him?—No, but I knew it.

696. When young people are wanted in the mines, who has the selection of them; do the masters engage them, or do the workpeople?—The workmen engage them, but they have to go before the master before they can go down the pit.

697. Do you know whether or not it is the practice of the workmen, when they engage young people, to inquire if they can read and write?—Some do, and some do not.

698. Mr. *Fawcett.*] You attribute somewhat serious consequences, do you not, to the clothes which the women wear on the surface of the mines?—I do.

699. But I suppose they are at perfect liberty to wear whatever clothes they like; the woman is left entirely to her own discretion, is she not?—She could not do the work with any other dress.

700. Do you think that a woman to do that kind of work must be dressed in clothes which are not quite decent?—Yes.

701. You have said that the dress does not expose any part of the person; what is the great objection that you attribute to it?—I believe it has a degrading tendency. I believe that a woman having children (and there are plenty on the banks that have), cannot do her duty to them.

702. That is to say, you think she is taken away from her home when she ought to be looking after her children; but you do not attribute that fact to the clothes which she wears, do you?—If she wore petticoats, and it was windy, and if she was engaged on the pit heap, her clothes might get engaged by the cage and she might be dragged down the pit.

703. You think then that from the nature of the employment the women cannot wear any kind of petticoat?—Yes.

704. Can the majority of the boys employed in the mines read and write?—I do not think they can.

705. Some of them cannot read and write at all, I suppose?—The majority cannot.

706. Mr. *Bruce.*] Would you altogether forbid female employment about the collieries?—As an individual I would.

707. You have said that there are colliers' wives and daughters employed; they would therefore have somebody to earn wages for their support, I presume; but you also said that there are widows employed, what wages do those widows get?—I am not aware that they get any more than the others get.

708. What is that?—From 8*s.* to 10*s.* a week.

709. Do you think that those widows could get employment anywhere else, which would bring them in as much wages as that?—I cannot speak to that.

710. You would still be prepared, would you, to prevent their obtaining a livelihood by these means?—I would.

711. Have you any boy of your own?—Yes.

712. How old is your eldest boy?—Nearly nine.

713. How many boys have you employed since the Act of 1860 came into force?—I do not think I have employed any little boy but the one I have at present.

714. You have only had him for 15 months, you say?—Yes.

715. Before that time had you no boy helping you?—I had a man; what we call a big drawer.

716. You said that you thought that out of the 50 or 60 boys employed in this colliery, about 20, more or less, were between the ages of 10 and 12, and that the majority of those could not read or write, and therefore I presume they were employed in violation of the law; is not that so?—It must be so.

717. Do the men take a great interest in this question?—The majority of them do.

718. Are they anxious to see the law enforced?—The majority are.

719. Have you ever heard of an instance in which they have done anything to put the law in force, and to see that boys were not employed under 12 who could not read or write?—No.

720. Do you think that in this country any

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law that you pass, however good, can really be effectual unless the population themselves assist in putting it into operation?—Many a man might wish to object to employing a boy, but he would become, perhaps, marked by it.

721. Marked by whom?—By his employers.

722. Do you think that the employers would find any fault with a man who obeyed the law, and objected to employ a boy between 10 and 12, unless he could read and write, or unless he could produce a certificate that he was attending a school?—I believe they would.

723. Have you ever heard of any workman objecting to employ a boy between 10 and 12, who could not read or write?—It is not left to men's option.

724. I thought the men employed their own boys?—They do.

725. Then the men could ask that question, could they not?—Even if the men did ask the question, the overlooker would set them on. In some cases they do ask it, not in all cases. The question may be merely asked, but I do not think it is often put to the test.

726. Have you ever seen any sign of interest on the part of the men to see the law enforced and to prevent the employment of boys under 12 who could not read or write?—The majority of the men themselves cannot read or write, and therefore do not appreciate the advantages of it as fully as they might.

727. I thought you said that the majority of them were anxious not to employ boys under that age who could not read or write?—As far as their ability goes they are.

728. With regard to these boys, the greater number of them are the sons of colliers employed about the pit, are they not?—Chiefly.

729. Are there sufficient schools in your neighbourhood to take in the boys, supposing the boys were sent there?—There are schools; there is one, I believe, or two.

730. How far from your colliery?—Within a mile.

731. Are those schools large enough to accommodate the children of the working population?—I do not think they are.

732. Have you any night schools?—Yes.

733. And do any of these boys attend the night schools?—I do not know one that does.

734. They are too tired to do so, I suppose?—They are too tired.

735. Do you think that the long hours of work affect the boys' health?—I believe it does.

736. Have you observed that in cases within your own experience?—Not immediately.

737. How many years have you been a working collier?—Twenty-three years.

738. What did you mean by saying that you had not observed immediately whether the health of the boys was affected by the long work?—I meant not personally; judging by their appearance I should say that their health is affected.

739. Is the work that they have to do hard?—In some cases the work is very hard.

740. In what does the work underground consist, principally?—Linking the tubs together with dolly hookers and drawing.

741. How far does a boy draw the tubs?—Various distances.

742. Does he draw them into the main heading, or store, which you may be working, or does he take them down to the mouth of the pit?—He cannot take them down to the mouth of the pit where I work.

743. Where does he take them to?—To a shunt, or siding

744. How far is that from your far end?—Four hundred and fifty yards.

745. Does he haul those by himself?—Yes.

746. How much does he take at a time?—One tub.

747. Containing about a ton?—No, some 700 weight.

748. That is the hardest work, I suppose?—That is the hardest work.

749. He helps you to fill, besides?—Yes.

750. Does he help you to truck the coal?—No, very seldom; he may try a little sometimes.

751. What o'clock do you go underground yourself of a morning?—From five to six.

752. When do you come out?—From four to five.

753. Do the boys go in and come out at the same time?—No, not all together.

754. Does your boy go in and come out at the same time as you do?—No, he does not come out at the same time as I do.

755. Does he remain after you?—Yes.

756. For what purpose?—To fill the tub; to draw the coal out.

757. Is that the general practice?—In some pits.

758. In your pit, is it the general practice that the boys work longer than the men?—I believe it is.

759. Have you any night turns?—Not in that pit, not as a rule; there are sometimes one or two engaged.

760. When there is a heavy demand for coal, I suppose?—Not for that; but when there is anything that wants doing, and that cannot be done conveniently in the day time.

761. Are boys employed for that work?—Along with the men. If the men that are doing it have boys, those boys help them.

762. Is that frequent?—That is the rule. If I was to go working by night, my boy would have to go with me.

763. Have you stated at what age you would allow boys to go below ground?—I would not let them go below under 12 years of age.

764. Would you let them go as early as 12?—If they could read and write, I would.

765. Some colliers from the North suggested before this Committee, when it was sitting last Session, that boys should not be allowed to go underground till 14, what should you say to that proposition?—From 12 to 14, they should attend school, I should say.

766. Do you think that if they were prevented from going underground till between 12 and 14, say till 13, they would attend school up to the age at which they begin work?—If the thing became general, they would.

767. Do you mean if they were not allowed to work at any other sort of work up to the age of 13?—No, I do not mean that.

768. But if other work were open to them, is it not likely that either the wants or the selfishness of their parents would send them to that work?—I have three myself, and if I can maintain them up to that age, they shall not go before, if they go then.

769. Do you think that the great majority of colliers would take so sensible and proper a view as

as you have just now expressed, of the duties of a parent?—I believe that the majority would.

770. The majority at this moment are not obliged by any law, to employ their children up to 13, are they?—No.

771. Why do they do so?—They do not understand the duties of a parent toward a child.

772. Then the same majority, if they were prevented by law from employing their children underground before 13, would seek some other employment for them, would they not, unless they happened to be as intelligent and sensible of their duties as you are?—Perhaps not; I cannot say whether they would or not.

773. *Chairman.*] You say, I think, that the wages of a boy are paid to the miner who employs him; that is to say, if you employ a boy, you receive his wages?—Yes.

774. Do those wages vary according to the age of the boy?—According to the work done.

775. You are allowed to hire a boy yourself, are you not?—Yes.

776. But you must produce him before one of the authorities of the mine?—Yes.

777. Does the authority of the mine then inquire into his age?—They ask him if he can read and write.

778. And they take it upon your statement; is that the case?—No.

779. Do they try whether the boy can read or write?—If the boy is over 10, I do not think the question is ever asked.

780. But you have to produce the boy before he is allowed to go into the mine?—Yes.

781. I am not sure that I quite understand you; supposing you bring your own boy or any other with you, the wages are paid to you only?—Yes.

782. And the wages would be according to his age?—For the work done.

783. Then there would be no distinct payment for the boy, if it was for the work done?—Not as drawers, but a boy from 10 to 12 cannot draw.

784. Supposing a miner goes to the mining authority, and says, "I have got a boy between 10 and 12," or, "I have got a boy between 12 and 14," the allowance made would be different, would it not, in the two cases?—No.

785. It is only where the boys are hired in the first instance by the miner; is that what you mean?—The miner is paid by the score for getting the coal, and he has to find his own drawer.

786. Then, if I understand you, there is no difference between the wages; you mean that it is left to be settled between the miner and the drawer?—Yes, what he gives the drawer is settled between those two.

787. Then there is no regular rate of wages for the boys?—No.

788. To whom have you to produce a boy before you are allowed to take him down?—To the man in charge of the pit.

789. And he inquires from you whether the boy can read and write?—I do not know that ever I took any myself.

790. When I say "you," I mean, would any other miner inquire whether the boy could read or write?—In some cases he might.

791. What is the nature of the work of the women at the mouth of the pit?—Putting the empty tubs in the cages, and the men pull the full ones out.

792. They are mixed up in their work then with the men?—Yes.

793. Mr. *Bruce.*] Are they employed in screening the coals much?—Some of them.

794. *Chairman.*] In this picture (*handing it to the Witness*) they are represented as carrying back the empty tubs, are they not?—No; those shown in that picture would be employed perhaps in the waggons and among the coal.

795. That is a sieve, is it not (*pointing to the picture*)?—Yes, a riddle or sieve.

796. That is not very hard work, I suppose; it does not require great strength, does it?—It is not easy to manage a barrow full of coal on soft ground.

797. Mr. *Woods.*] I want to make it clear what is the inducement to a woman to work in the neighbourhood of the mine; there is open competition, I presume, between agricultural labour and labour on the surface of the ground in the neighbourhood where you work, is there not; a woman might work in the field, or she might work at the pit, whichever she pleased?—If she could get work, she might work in the fields.

798. Is it not simply the amount of the pay which induces the women to work in the neighbourhood of the pit; they get better wages, I suppose, in that work than they get in field work?—I cannot say.

799. Do you think that the colliers are too poor to keep their own female relatives at home unemployed?—There are some that are.

800. Is that the reason why you seek legislative enactment on the subject of women working in mines, or what is your reason?—Because I consider it degrading to the sex.

801. To work as they work?—To work as they work.

802. You said that you went yourself between five and six o'clock in the morning, and came away from four to five in the afternoon, but you also said that the boys came away later than you; do the boys go always with the men in the morning?—No; not always.

803. Before or after the men?—Generally after.

804. It does not follow then that the boys, because they come away after the men, have been in the pit longer than the men?—They cannot be much after them.

805. For how many days in a fortnight does that occur; how many days in a fortnight do you go down to work between five and six in the morning?—From nine to 10 days in the fortnight.

806. Then there are two other working days in the fortnight; how about them?—The men do not work on one Monday, generally.

807. How about the other day in the fortnight?—That is the pay day, when the men generally give over at noon.

808. Then as to the boys, have they the same pay days as the men have?—At our pit, which I am speaking of, that is not the rule.

809. The boys do not work, do they, when the men do not work?—Yes; they leave the pit at four on pay Saturday, and the men stop at all hours between noon and four.

810. You were asked about schools in your neighbourhood, and you spoke of schools within a distance of a mile; suppose you took a distance within two miles, how many schools would that include that you know of?—Some five or six.

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811. What we call national schools, and schools of all denominations; I think there is a Roman Catholic one, and several Church of England schools?—I do not think there are five or six of that description; I mean cottage schools.

812. Is there one at Blackrod?—I do not know much about Blackrod.

813. Is there one at Aspull Moor?—There is one there.

814. Are there two there?—Yes.

815. How many do you suppose there are altogether on Lord Crawford's estate?—I cannot say.

816. Mr. *Greenall.*] Can you tell us the number of women employed at the colliery where you work?—I should say from 15 to 20.

817. Are there more women employed now than were employed five or ten years ago, or fewer?—I do not think there is much difference.

818. Do you think that the employment of women on the surface of a coal mine is more degrading than employing them in agricultural work labour?—Yes.

819. Why; is it simply because of their dress?—And the language used.

820. Still the language used, I presume, has nothing to do with the employment, and you need not have worse language in one case than the other; you attribute the chief difference to the dress which they are obliged to wear; they are not dressed, in fact, as you think they ought to be?—No.

821. *Chairman.*] Have you turned your attention much to the ventilation of the mines?—Not much.

822. Have you had many accidents in the mines in which you have been employed during your experience of 23 years?—Not in the mine that I work in at present.

823. Where they have occurred, have they been accidents from the explosion of gas, or from other causes?—Various causes.

824. What, according to your experience, has been the most frequent cause of accidents?—I should say the fall of roofs and explosions.

825. In the mines that you have seen, do you think that adequate care is taken to prevent the fall of roofs?—Not in all cases.

826. You have to prop up the roof as you go on, have not you?—Yes.

827. Have you a proper supply of timber for propping up that roof in the mine where you are at work now; where should you have to fetch the timber from to prop it up?—The place where the drawer fetches the tubs from.

828. How far would that be?—That may vary.

829. Taking it upon the average, how far will it be?—I cannot say.

830. Would that wood be properly cut up and fit for use at once?—As near as it can be.

831. Have you known any cases in which miners have had to fetch the wood from the mouth of the pit and cut it up?—I have known them obliged to cut long props into short ones.

832. And go to the mouth of the pit to fetch it?—In some pits; not where I work at present.

833. Is one cause of the accidents from the roof falling in, that the workmen are not able to see the roof as they work on?—That is partly the reason.

834. The Davy lamp does not throw light upon the roof, does it?—No.

835. You do not see the state of the roof as you go on with your work?—Not perfectly.

836. Is that one of the objections that the workmen have to the use of the Davy lamp?—Yes.

837. Supposing you see the state of the roof with a Davy lamp, what have you to do with the lamp; you have to turn it upon the side, have you not?—Yes.

838. Is that liable to break the lamp?—No.

839. Will not the flame go against the glass if it is held on one side?—If it is of glass, it will go against the glass.

840. Are there any other objections that the miners have to the use of a Davy lamp?—Yes, they cannot see to do their work with it, and it is injurious to their eyesight.

841. Do they see the bottom of the work, or is there any difficulty with the Davy lamp in seeing the floor where they are working?—It is difficult in some places to see the floor.

842. And, in consequence of that, are they liable to take up earth and rubbish besides the coal?—That depends on the nature of the bottom or the roof.

843. They would be liable where the bottom was loose to take up earth and mix it with the coal, would they not?—They might do that.

844. As far as you have seen, is there a general dislike on the part of the workmen to the Davy lamp?—They look upon the Davy lamp as an essential, in order to explore whether there is danger, but not as a necessary thing to work with.

845. Supposing that the ventilation of the mine were as nearly perfect as it could be under ordinary circumstances, would there be any occasion for the Davy lamp?—If the ventilation was perfect there would not be any occasion for it.

846. Then a Davy lamp is rather a means of supplying a defect of ventilation; is that so?—Yes.

847. You said, I think, that you had not turned your attention very much to the ventilation of mines?—I have not.

848. Are the boys in the mine where you work employed much to shut the ventilating doors?—Not in the mine where I work at present.

849. Boys used to be employed a good deal in that work, used they not?—Yes.

850. That was their chief work, I believe?—Not their chief work; some one or two boys in a pit perhaps were employed in it.

851. Are they less employed now in keeping the doors shut than they used to be?—I believe they are.

852. Is the drawer in some cases now expected to open and shut the door behind him?—He is.

853. Do they always attend to that?—I believe they do.

854. They have to stop to open a door and then to stop again when they have got through, and to go back and shut the door?—No the door will shut itself, or should do so.

855. They are swing doors?—Yes.

856. Are they generally in good repair?—In the mine where I am at present they are.

857. Are the brattices for the purposes of ventilation in good order and repair?—Where I am at present they are.

858. How near should a brattice be brought to the miner when he is working; how near the end should it be carried from the miner's face?—It should go within two or three yards.

859. According

859. According to your experience, is it generally carried so near as that?—No.

860. How far short does it fall?—It varies according to the way in which they are driving the steam.

861. Is it often far short of the point to which it ought to be carried?—I do not think it is; not where I am working at present, but there are places where it is.

862. Is there any rule in the mine that the miners must not work beyond a certain distance from where the brattice goes?—I do not know that there is.

863. The working that is more than a certain distance beyond the ventilation is not considered a safe working, is it?—No, but still they do work in such cases.

864. Are there any rules as to forfeitures upon workmen for working without the ventilation being carried up to the proper point?—They work in some places altogether without brattices for a long distance.

865. That you have known within your experience?—I have worked 130 yards myself without any brattices in former times; not where I am at present.

866. There is a great difference between mines as to their liability to explosion, is there not?—The place of which I speak is in the same seam where I am working at present, but not under the same part.

867. What might be safe in one mine might be very dangerous in another, might it not?—They could not drive coals up hill without a brattice, but down hill they can, and in some places they do drive them down hill for the sake of a brattice, and it affects the health of the men very much where they do that.

868. They drive them down in order to avoid the necessity of having brattices, you mean?—Yes.

869. If you are working a little up hill the gas retreats from you?—It goes to the end up hill.

870. So far as your experience goes, is the ventilation sufficient in the mines that you have known?—No, it is not.

871. What means do they use for ventilation?—The furnace chiefly.

872. Mr. *Woods.*] If a coal pit were highly charged with gas, would that fact tend to cause the colliers to avoid that pit and to seek employment elsewhere?—No, I do not think it would.

873. Would you yourself prefer to work in a mine that was not highly charged with gas?—I do not know that I would work in it.

874. Do you mean that you have no choice?—I would certainly sooner work in one with as little gas as possible.

875. You would not choose to work in one highly charged with gas?—No.

876. Do you think that if a colliery or pit had an ill repute for explosions that circumstance would affect the rate of wages which would have to be paid to fill that pit with men?—Yes.

877. It would tend, would it, to make the rate of wages higher?—Yes.

878. Whose duty is it to fix the brattice in your colliery?—The fireman's.

879. Is it invariably the case that the fireman has to fix the brattice?—Yes.

880. What is the means of prevailing upon the firemen to fix it; do you ask them to fix it when you think it is required?—Sometimes it is necessary to ask them.

881. In the event of their not doing it, and if you thought the place dangerous, what would you do then?—In time of necessity I have put the brattices up myself. When I wanted to fire a shot, and the brattice has not been sufficient, I have put a little up before I did fire.

882. Taking the whole neighbourhood generally, if lamps are used in a colliery, do the men receive higher pay per ton than where lamps are not used; or, in other words, where lamps are required, is the rate of payment higher than where lamps are not believed to be required?—No, I do not think it is.

883. But you have told me that where there is much gas the men do not choose to work?—They do not choose to work there.

884. Do you think that it is the interest of the employers to manage their ventilation in such manner as not to run the risk of an explosion?—I believe it is the interest of the employers to have good ventilation.

885. When you are speaking of ventilation, it may be considered, may it not, in two ways; the ventilation, the absence of which is dangerous to the mine, and the ventilation, the absence of which is unwholesome to the men. Do you mean to tell the Committee that it is a general practice to work coals down brow to avoid the difficulty of ventilation, or do you only mean that now and then it is the case?—There are thousands of yards done that way down brow.

886. And how do they draw the coals up?—It does not shed very much; a very little fall will cause it to do so.

887. Mr. *Fawcett.*] Colliers are paid, I suppose, generally speaking, by piecework, not by fixed weekly wages?—By piecework.

888. Then, of course, it is a matter of bargain whether you take the work or not; you go and look at the work, and if you do not think what is offered enough, you do not take it; there is some kind of bargaining, or settling, I presume, and the terms vary from time to time, do not they?—If you engage, you may get the place where you engaged to work; and when that job is finished the man who engaged you may find you one of the other jobs.

889. You are paid so much per ton for the coal you get out, are not you?—We are not paid by the ton.

890. By what are you paid?—By the score; by the measure.

891. My question had reference to this; if you thought that a mine was badly ventilated, you would not choose, would you, to work in that mine if you could get the same wages in a mine that was well ventilated?—No.

892. Then, if that is the case, and if every one would be of the same opinion as yourself, the wages paid in a badly ventilated mine for the same kind of work must be higher than those paid in a well ventilated mine, must there not?—If there came to be an explosion, and some lives were sacrificed, the wages in some cases would go up. At the Arley Mine explosion, for instance, the wages went up, but in other cases which they have had lately, it has made no alteration.

893. Mr. *Bruce.*] Is there much gas in your pit?—Not much; there would be if it was not well managed; I believe it is very well managed.

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894. The ventilation in your pit, then, is very good?—Yes.

895. You have no cause to complain?—No.

896. You are speaking of your experience in other mines when you speak of bad ventilation?—Yes.

897. I suppose however well managed the ventilation may be, there might be a danger in working with naked lights, would not there?—Not if the first rule was carried out.

898. What is that first rule?—If there was a sufficient amount of ventilation to render harmless noxious gases.

899. But do you think that you can always carry the ventilation into every far end, every heading that is driven in a colliery?—I believe they could if they were to sink two shafts.

900. There are such things as blowers, are not there, in coal?—Yes.

901. And you come upon them sometimes without any preparation?—Yes.

902. Supposing that you were working with a naked light, would not the gas escaping from one of those blowers subject you to the danger of an explosion?—Not if there was nothing but a blower. If there was no gas for the blower to ignite, besides the blower itself, it would not be dangerous.

903. Why not?—Because if the ventilation was sufficient it would take it away.

904. A blower is nothing more than a reservoir of gas; the gas comes out and mixes with the air, and after mixing with the air in certain proportions, it becomes explosive, does it not?—Blowers so extensive are not very frequent.

905. Although not very frequent, they are occasionally found, are they not?—I do not know. I cannot speak to that.

906. Have not accidents frequently occurred from blowers in pits that were well ventilated?—They are said to have occurred from such; whether they did or not I cannot say.

907. When you were working in pits, or in headings, that were badly ventilated, did you complain to the inspector?—No.

908. Have you ever known complaints made to the inspectors of imperfect ventilation?—I cannot say that I have.

909. Have you ever heard of an inspector neglecting to attend to a complaint that appeared to be a reasonable one?—Formerly, the inspector would not attend; not upon a recommendation from a workman; they will at the present time, I believe, so far as they can.

910. We are dealing with the present. Can you suggest any better plan for securing the health of the workman than that he should have an opportunity of complaining to an inspector, in case the ventilation is not properly attended to?—I believe the inspector could not attend to it.

911. Why not?—There is not a sufficient number.

912. Have you ever known a case where an inspector has refused to attend to any just cause of complaint?—I have never seen an inspector down in the pit in my life.

913. In your pit, do you mean?—In none of the pits I have worked in have I ever seen one down yet.

914. Does not that prove that no complaint was made to the inspector?—No.

915. You would have the inspectors inspect every pit in the country, whether complaints were made or not, would you?—They should.

916. And you would wish that the Government should take upon itself the charge of seeing that the pits were properly ventilated?—Yes.

917. *Chairman.*] Is it the idea among the miners that if what you call the first rule were properly enforced naked lights might be safely used?—In most cases.

918. You are aware that that rule only speaks of safety in ordinary cases?—Yes.

919. There are men employed in mines to inspect the workings, are there not, and see that they are safe?—Yes, the firemen.

920. Is that attended to usually, as far as you have seen?—Yes, where I am at present.

921. Was it so in the other mines where you have been?—In some it was, and in some not.

922. The duty of a fireman would be to go round with his safety lamp, and to inspect all the workings, would it not?—Yes.

923. To go up to the end and inspect all the workings?—Yes.

924. It would take him a very long time to do that, would it not, unless there were a great many firemen?—If there were sufficient they could do it.

925. At what time would a fireman begin to go his round to do that?—In the morning. There is also a fireman that goes round in the night.

926. At what time would the one at night begin?—I believe he goes down at eight o'clock.

927. But the work which he has visited at eight o'clock, and found safe at eight o'clock, may not be safe at six o'clock the next morning, I suppose?—No.

928. Mr. *Woods.*] Are not there firemen, night and day, always down?—Yes; but what betwixt the night fireman examining the place, and the workman going to his work, there is no examination.

929. You have said that a fireman goes to work at eight at night; when does he leave his work?—At six in the morning.

930. And does another fireman go down at six in the morning?—Yes, or earlier; but it is perhaps twelve at noon before that man gets to some of the workings.

931. When are the workings examined during the night to see if they are fit for work the next day?—The fireman will take them ordinarily as he comes to them.

932. Beginning at eight in the evening?—Yes, I believe that is the time he goes down.

933. He begins, probably, at such an hour as to enable him to go all round before the men come to their work, does he not?—He takes the workings as he comes to them.

934. *Chairman.*] There is some dissatisfaction among the miners, is there not, as to the mode of payment?—Yes.

935. Is that as to the weighing?—There is no weighing with us.

936. In the mine where you work they are not paid by weight, they are paid according to the tubs; is that so?—So much per score.

937. When you have filled the tub it is sent up, is it not, with your ticket, and it is scored to you?—Yes.

938. Can you tell the Committee whether the workmen have any feeling of dissatisfaction, and whether complaints are made as to that?—They have a feeling of dissatisfaction.

939. What

939. What complaints do they make as to that?—The coal in being transferred from the face to the shaft naturally drops off on the way sometimes, and they lose plenty through that circumstance, the tub not coming up full of coal.

940. An objection is made to the tub not being full enough; is that so?—Yes.

941. What is the consequence of that objection; is that tub forfeited, is the workman allowed nothing for it?—He is allowed nothing for it.

942. Is it the practice to pile up the coal upon the tub?—Yes.

943. So that it is difficult for a tub to be taken away without some falling off?—Yes.

944. And the workmen complain that objection is taken to some of the coal having fallen off; is that the case?—Yes.

945. You do not mean that if a tub is not quite full they forfeit the whole, do you?—They forfeit the whole if the tub is not to the liking of those who are above.

946. But they must have some way of testing it, have not they; you know how they test the fulness of a bushel, for instance, by passing something over it?—That is not the case here.

947. There must be some rule, I suppose, for seeing whether the tub is full enough?—It must come up as full as ever the coal will stick on; in some places they fill them up in this way (*describing it*).

948. And the coal is liable to come off in consequence of the tub being so full?—Yes.

949. And the whole pay, you say, is liable to be forfeited for that tub?—Yes.

950. What is the weight of coal in the tubs?—The tubs vary in size, from 4 cwts., I should say, to 10 cwts., according to the mine.

951. What is the price paid to the workmen for a tub?—In some cases it is 1 *s.*

952. And in others much less?—In others 3 *d.* or 4 *d.*

953. That is according partly to the size of the tub?—Yes.

954. And partly to the difficulty of the working?—Yes.

955. Are there any complaints among the miners as to changes in the size of the tubs?—Yes, continual complaints.

956. They suspect, do they, that the tubs are sometimes changed without their knowing it?—Not without their knowing it, but without their having any voice in the matter.

957. So that their work is increased without their pay being increased?—Yes.

958. Do you believe that to be so?—I am sure of it.

959. How is that done?—They do not put a new set of tubs in all at once; they bring them in by degrees, one one day, and another another day.

960. And the new ones, in that case, would generally hold a little more than the old ones; is that what you mean?—Yes.

961. Are there other causes of forfeiture besides the tub not being quite full; supposing, for instance, that it is mixed with earth?—They will take it then for themselves.

962. You mean if it is not quite clean?—If it is not quite clean they will take it and sell it.

963. The understanding is, that it is the business of a miner to send up a tub full of clean coal?—Yes.

964. Can the miner always avoid putting a little dirt in?—Not always.

965. The difficulty arises partly from the want of light, does it not?—Yes.

966. And if there is a little dirt mixed with the coal, does he forfeit the whole of that tub?—Yes.

967. What becomes of the tub?—It is sold with the rest.

968. Does it take much trouble to remove the dirt?—Not much.

969. Is that a part of the work that the women do?—Yes.

970. That is done by the coal owner, and the miner receives no pay for that?—Not for that.

971. Is it the feeling of the miners that they would like to be paid according to weight?—Yes.

972. Is that feeling general?—Yes.

973. Have you ever worked in any collieries where they are paid by weight?—Not in Lancashire.

974. Their feeling, you say, is that they should be paid by weight; what is their feeling as to the appointment of a weigher?—It is no use appointing a weigher till they get paid by weight; they would willingly do that.

975. You have had no experience of weighing, and in the collieries where you have been employed you have not had to consider the question who should appoint the weigher?—The men should appoint a weigher, I think.

976. Where you are paid by measure; is there anybody on behalf of the miners to check the weight. Supposing a man, on behalf of the master, says, "I cannot allow anything for that, because it is not full;" is there anybody there on behalf of the workman to say, "Yes, it is full enough?"—I believe there are two instances where that is the case.

977. If the master, or the officer who is the agent of the master, objects to a tub of coals not being full enough, or piled up enough, is there anybody at the pit's mouth to fight the battle of the workman, and to say that it is full enough?—Only in two instances; there are two pits where there is a workman's checker, but they can take the tubs for all that; he can only remonstrate, and they take all the same.

978. Who is the person on behalf of the master, that declares the tub to be forfeited; what do you call him?—He is called the head banksman.

979. Do these banksmen consider it to be their interest, in order to please their masters, to forfeit as much as they can?—I should think that is so.

980. Have you ever heard of masters complaining that their head banksmen did not get forfeitures enough?—I have heard of masters saying that if they did not take them, some one else must.

981. You might have too easy a head banksman, and that might be a reasonable complaint on the part of the master, might it not?—Yes, it might.

982. Because the master complained that there were not forfeitures enough, it would not necessarily follow that he wished the banksman to do injustice?—No.

983. Mr. *Kinnaird.*] Is there not a very admirable machine which has been invented, which is used in some pits, and which entirely satisfies the wishes of the workmen, as to measures, if the masters would use it?—There is none in use that I know of; I never heard of it.

984. You

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984. You have never heard of such an invention?—No, there is none in use.

985. Supposing there was such a machine, would not that satisfy the workman, who only wishes to have what is just and right, namely, the full weight and allowance for his coal?—He wishes to be paid by weight.

986. Mr. *Bromley.*] Has this system which you allude to, by which the tubs are altered in size, been going on long?—Ever since I can remember. When the tubs are put in, there is generally a weight fixed on them, and they are called of such a weight, and I have worked at collieries where they have been weighed in the course of a few years after, and they have been a hundred weight heavier, and there has been no extra remuneration for that.

987. *Chairman.*] They were marked less weight than they actually contained?—They keep continually rising.

988. Mr. *Woods.*] Do you mean that it is customary to mark the weight on the tubs?—No, but when a man starts a colliery, he puts tubs in and calls them such a weight, six or seven hundred weight.

989. As to dirt, some mines have layers, or, as they are called in your country, bands of earth in them, have they not?—Yes.

990. Is it any part of the contract with the collier, that he is not to send that dirt up, and is it part of his duty not to send it up?—It is.

991. Then if he does send that dirt up, he breaks his contract with his employer?—He is not allowed to send dirt up.

992. But if he does send up dirt, mixed indiscriminately with coal, he breaks his contract?—No man will send dirt and coal together knowingly, because he knows he will get nothing for it.

993. It is not possible to take it all out, no doubt, but when they do send the coal up mixed with dirt, they have done their work in a more negligent manner than when there is no dirt. I suppose you agree with me to that extent?—It cannot be prevented; no man can pitch all the dirt out with the aid of a small light in the shaft.

994. But if one workman sends up more dirt than the average of the workmen he is a worse workman on the average than others?—Yes.

995. Mr. *Greenall.*] You say that you have worked many years in mines?—Yes.

996. And you have stated that during that time these tubs have grown larger and larger?—Continually.

997. How small have you known a tub to be, taking the smallest?—I think I have known some as low as two hundred weight.

998. What is the size to which they have grown?—I have known a tub which was four hundred weight perhaps now better than five hundred weight.

999. As I understand you, you think that an injustice is done to you because you send up tubs containing a larger weight of coals, for which you do not get more payment than you receive for the smaller tubs; is that so?—Yes.

1000. What do you estimate the injury done to you in that way at?—I should say that if the tub was four hundred weight and is now five hundred weight it would be one-fifth.

1001. Do you mean to say that comparing the present with the time when you began to work as a collier, you do one-fifth more work and receive no more wages?—The tubs have increased that much in size, and of necessity that must follow which you have stated.

1002. That is to say, that you are injured to the extent of one-fifth of your wages?—According to what I should get if I was paid according to contract when the works commenced.

1003. And you think that the remedy for that is payment by weight, do you?—Payment by weight.

1004. Who should appoint the weighers?—The master should appoint one, and the men appoint one, so that they should check one the other.

1005. Mr. *Fawcett.*] You must consider this constantly increasing size of the tubs, and also the fact that very often you are unnecessarily deprived of your pay for a tub from its being a little shaken, as one of your greatest grievances, do not you?—Yes.

1006. Have you ever had a strike in your district amongst your colliers?—Yes, but not lately.

1007. Have you mentioned that as one of your main grievances in a strike where you have had a combination formed, because, if what you say is correct, it must be the most serious grievance under which any man can suffer; was that, in fact, one of the grievances that caused you to strike?—It would be one.

1008. Was it mentioned to the employers when you stated your grievances to them?—I cannot say that it was mentioned to them.

1009. Have you never as a united body mentioned this very serious grievance to your employers?—There is scarcely a month passes but some pit in the district plays it a day, through this very thing, in order to remonstrate with the masters.

1010. Do you mean that in almost all the pits in your district, the men, owing to the feeling that they suffer under this grievance, leave off work one day a month in order to remonstrate with the masters?—One pit out of the whole district I should say on the average stops a day through this cause.

1011. In consequence of the men feeling that they are injured?—In consequence of the masters taking their stuff.

1012. The men feel that they are injured, and refuse to work; is that what you mean?—In consequence of the masters taking the stuff when the men have sent it, leaving the size of the tubs out of the question.

1013. I will go back to the question of the tubs. You say that, owing to what you must consider the deception that is practised upon you, you and other men in the district are deprived of one-fifth of what is really due to you. Have the men ever entered into a combination to protest with the masters by making a joint complaint to them about the increasing size of the tubs?—Yes.

1014. What is the reply of the masters; do they deny the fact?—They say that the size of the tubs is not much bigger.

1015. When you have had a strike, you have not mentioned that as one of your grievances?—We have, amongst ourselves.

1016. Not to the masters?—To the masters too.

1017. Just now you said that it was not one of the grievances, but was it one of the circumstances, which caused you to strike?—It was.

1018. And then you gave in to the masters without

without any improvement on this point; is that so?—We did.

1019. You resumed work (having struck partly in consequence of this grievance) without the grievance being remedied?—Yes.

1020. So that the evil has gone on, and you have never got a remedy?—We have never got a remedy.

1021. Mr. *Bruce.*] Does the head banksman judge by the eye whether the tub is properly filled or not?—Yes.

1022. Is there no measurement?—No, he has nothing else to go by but his eye.

1023. What was your agreement, as to payment, when you entered?—So much per score.

1024. Was a tub supposed to hold so much?—There are so many tubs to a score; 20 tubs to a score.

1025. All the tubs which the head banksman thinks not properly filled are struck out; is that so?—Yes.

1026. How many years have you been working in your present colliery?—Only about 15 months.

1027. Have you calculated how much you have lost during that time by this unfair treatment?—No, I have not.

1028. Could you say how much it took out of your weekly wages?—No.

1029. In the last month how many tubs did you send up that were said to be not properly filled?—I sent none.

1030. In the month before, how many?—Perhaps two or three.

1031. Did you make any complaint as to the deductions then made?—There are continual complaints to the banksman.

1032. Did you make any complaint?—I am not aware; because sometimes two or three days may pass before you could get to know anything about it.

1033. Did you complain on the occasion in question?—No.

1034. Do you complain of the manner in which this power is exercised by the banksman at the colliery at which you work, or are you speaking of other collieries?—I am speaking of others.

1035. You do not complain of your own in that respect?—Yes; I complain of that as well.

1036. I dare say you are aware that in many other parts of the country the colliers are paid by weight, and not by measurement?—Yes, in some cases.

1037. Have you ever heard of any complaints being made there?—I cannot speak on that subject.

1038. Have you ever met colliers from South Wales?—No.

1039. Then you do not know (and it is a matter of fact), that they have got their grievances as to weight just as strong as you have as to measurement?—They have their grievances, no doubt.

1040. On this point I mean?—They may have their grievances; if it is not properly carried out, they have reason to complain.

1041. Is not that a point that they are able to settle for themselves, without coming to the Government to help them?—I cannot speak for them at all.

1042. But you can speak for yourself; are not you workmen in Lancashire able to take care of your own interests without calling in the Government to help you?—No.

1043. Has there been much emigration from your parts?—I cannot say that there has been much.

1044. Has the rate of wages risen or fallen of late years?—It has been said to rise, but through these indirect things it has not risen.

1045. You think that the demand for labour has not increased?—I think that the labour has increased according to the demand.

1046. That is the case in Lancashire, is it?—That is the case in Wigan.

1047. Have the men no voice whatever in the appointment of the banksman?—None at all.

1048. I suppose it would be very satisfactory to you if you had?—We have appointed men, and they have been carried off the bank altogether.

1049. By the master, do you mean?—By the master's servant.

1050. Do you mean that they have been forced off?—Forced off altogether.

1051. Have you ever endeavoured to induce the masters to allow you to appoint a man to look after your interests?—We have in some cases.

1052. And they have refused, have they?—They have refused; they said that they would not have a man there to interfere with their servants.

1053. *Chairman.*] You said that you could not, perhaps for two days, find out that any objection had been made to the filling of a particular tub; how is that?—It is in this way. Where I work at present, there are three nails (in some places it is four) where they hang their tallies, and if you come up after a certain time those are taken off, and you get your tallies in the morning.

1054. When you come up from the pit, cannot you see at once whether all your work has been allowed for?—No, you are not allowed to look; you get your tallies in the morning.

1055. Your opinion is, that the apparent increase of wages has been defeated by the increase in the size of the tubs?—It has.

1056. Has it ever occurred to you, that if the tubs had been kept down to their original size the wages too would have been kept down?—No, I think they would have gone higher.

1057. Do you think that you would not have been paid so much by the tub, as you are now, if the tub had been kept to its original size?—No, it is not at the time when the tubs are made larger that they make an advance in the wages. Let the tubs rise or fall, that does not affect the wages.

1058. Mr. *Woods.*] Referring to the question of employment in your neighbourhood, is it not true that there has been an immense increase in the last 20 years in what they call the get of coals from the Wigan coal-field?—I believe there has.

1059. As to the rate of wages, I am now speaking. Is it within your knowledge whether, taking the additional number of men now employed, they are all of them Wigan people, or whether some of them are strangers?—There are some of them strangers.

1060. Are there any Welshmen amongst them?—Yes.

1061. Any Irishmen?—Yes.

1062. Any Scotchmen?—Not many.

1063. Any Northumberland colliers?—I do not think many of them.

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1064. Do you know, of your own knowledge, whether the rate of wages paid to colliers in the Wigan coal fields is considered to be better, or worse, than the wages paid in any other coal field you like to name?—I do not know about that.

1065. Some of the Members of this Committee seem to think that the tub has grown a quarter in size by fraudulent means. The tubs are generally made to suit the height of the mine, are they not?—Yes.

1066. And the diameter of the coal pit up which they have to come; is not that so?—Yes.

1067. Consequently, when you spoke of the tubs increasing, did you mean that they had increased from four to five hundred weight fraudulently, or that they had increased by reason of a different system of working which had been going on in the mine during the past 20 years?—I meant that they had increased from four hundred weight to five in the way that I have mentioned.

1068. You did not mean that they had increased from two hundred weight to five hundred weight fraudulently?—No, the two hundred weight never was made five.

1069. Then this fraudulent increase (I will call it fraudulent, though that is not the word which you have used) has been an increase from time to time made without the apparent consent of the men?—Yes.

1070. What is the time of hiring of these colliers; what notice is required for leaving a situation?—Fourteen days.

1071. If the tubs were fraudulently increased a man could discontinue working by giving 14 days' notice?—But if he goes to another place there is the same thing going on there.

1072. But he can leave that place where the wrong has been committed?—It is general; wherever he goes he has to submit to it.

1073. Could a man leave the place where he was working by giving 14 days' notice?—Yes.

1074. You told the Committee, as I understood you, that it was a common thing in your country for a pit to be stopped because of this difficulty?—They will play a day, I said, to remonstate with the master for taking stuff.

1075. Not to remonstrate with him on the size of the tubs or boxes?—No, for taking stuff.

1076. But as to the gradual growth in the size of the boxes; if the men can leave their work by giving 14 days' notice, I suppose we must assume that they are only defrauded to the extent of the 14 days?—That may be the case at that one colliery, but all the others are just the same.

1077. What do you assess the growth at in the case of any colliery that you know; is it within your knowledge that the score of coal (you are paid, you say, by the score) increases in size; what size have you now, for instance?—Upwards of a hundred weight more.

1078. On what size is that increase?—A tub that weighed four hundred weight.

1079. You mean that it grew into one that weighed five hundred weight?—It grew into one that weighed five hundred weight.

1080. I suppose that whenever there was a strike in the neighbourhood, this tub was assumed to be five hundred weight when it was known to have grown into five, although it had originally been called four?—It may have been mooted, but I have not been much mixed up with strikes.

1081. *Chairman.*] Length of pay, I understand, is one of the grievances of the workmen, is it not?—Yes.

1082. Where you work now, how often are you paid?—Once a fortnight.

1083. Is it ever a longer interval than that?—No, not under my own company.

1084. Have you ever known it once a month?—Not there.

1085. Have you in other places known it once a month?—Yes.

1086. Do you consider that it makes much difference to the workmen whether he has his pay once a fortnight, or once a week?—I do.

1087. The workmen generally would prefer to have it once a week, you think?—Yes.

1088. Supposing they want money in the interval before the pay-day comes, will it be given to them?—No, not in most cases.

1089. If it is given to them will they have any deduction made from it?—I do not think there has been any of that this long while in most places.

1090. Sir *Philip Egerton.*] In the event of your being paid once a week, you would expect to leave off work every Saturday at 12 o'clock, would not you?—Yes.

1091. Then you would get an additional day in every fortnight exempt from work?—Not an additional day.

1092. A half day, then?—Yes; but you would have to go some miles about it, and that is not very pleasant.

1093. Are there any deductions made from the pay?—Not where I am at present.

1094. No deductions for tools?—No, we find our own tools.

1095. No deduction for lights?—We find our own lights and lamps.

1096. Is there any deduction for the sick club?—Not where I am. It is an accident club, not a sick club.

1097. Then you receive your pay free of all deductions; there is nothing kept back?—There is nothing kept back.

1098. There is no truck system?—No; there are some few cases where a little of that is done indirectly, but as a general rule it is not so.

1099. Mr. *Bromley.*] You have no truck system then at all, you consider?—No.

1100. Mr. *Woods.*] Where are the wages paid in your country?—At the pay-office.

1101. Do you know any case where they are paid at public-houses?—Not in the case of the men immediately employed by the masters.

1102. You do not know any case in which the men employed directly by the master, are paid at the public-house, in your neighbourhood?—No, not in my neighbourhood.

1103. Mr. *Greenall.*] Is the only change you wish in payment, that you should receive your wages weekly instead of fortnightly, or have you any other wish with regard to that?—Weekly payments, and less kept in hand, I should like.

1104. At the fortnightly payment, is there always some money kept in hand?—Almost always some money.

1105. In what proportion to a weekly wage; how much money?—Part of mine is kept a week, I have always a week's work in hand, or one portion of work.

1106. Reducing that to money, how much money is kept in hand?—I have so much per yard, and so much per score; the yardage is measured

measured on the odd Saturday; that has been the practice.

1107. It would be much clearer to my mind if you told us, supposing you went for your money at the end of the fortnight, and had 2*l.* due to you, how much of that 2*l.* would be held back?—Perhaps some 15*s.* or 16*s.*, for yardage; then there is stuff for me and for my drawer; it would be 2*l.* altogether, perhaps.

1108. Mr. *Woods.*] The pay-day is on a Saturday, once a fortnight?—Yes.

1109. When you receive your money on Saturday, how far down towards that Saturday have the wages been computed; to Thursday night, or Friday night, or Friday noon, or to what time?—The scoreage goes to Wednesday night, and the yardage to the Monday, because since the company was amalgamated, they have put a day on the one and taken it off the other.

1110. The yardage is measured up to Saturday night?—Monday morning.

1111. Then a whole week's money is retained in hand in the case of the yardage?—Yes.

1112. And up to Wednesday on the scoreage?—Yes.

1113. *Chairman.*] Is the object of the workman in wishing to have their pay weekly more that they may have the use of their money, or is it that they may get an additional half holiday?—I believe they wish it from both causes.

1114. Mr. *Fawcett.*] I suppose you often talk over these things amongst yourselves. Do you think that there is a general feeling amongst the men, that an Act of Parliament should be passed to compel payment by weight, and also payment once a week instead of once a fortnight?—Yes.

1115. You wish an Act of Parliament to regulate all those things as well as the employment of women and children?—Yes.

1116. *Chairman.*] Have you known many accidents from many causes in the course of your experience?—Yes.

1117. With regard to coroner's inquests, have you ever known that a miner has been killed, and that there has been no inquest?—No.

1118. Are the men satisfied with the mode in which the juries are composed on those inquests?—No.

1119. What do they object to?—They think that they, as men having a knowledge of how the accident happened, should be allowed to be on the jury.

1120. There is some dissatisfaction with the composition of the jury, then?—Yes.

1121. Is that a general feeling?—That is a general feeling.

1122. Have you heard any strong expression of feeling on that point?—Yes.

1123. Mr. *Fawcett.*] You think it a grievance, you have told us, to be paid once a fortnight instead of weekly?—Yes.

1124. Have you ever represented that to your masters, and told them that you considered it a grievance, and that you would be very pleased if they would pay you once a week instead of once a fortnight?—I cannot say that we have directly done that.

1125. You have never thought of the men sending a request to the masters, and asking them to do so?—I believe they have done so in some cases.

1126. Do you know at all the nature of the masters' reply?—No.

1127. You have never suggested to your own master, or to any of his agents, that you should like to be so paid?—No.

1128. Why have you not said to your master, some day, that it would be very much more convenient for you to be paid weekly than fortnightly, so that you would know what his reasons were (if he had any) for not doing that. You would not be afraid to make such a request to your master, would you?—Well, I should, individually.

1129. Have you any reason to suppose that the masters would object?—I have.

1130. Why?—Because some take it longer still.

1131. Some might be willing, perhaps, to take it shorter. You have no definite ground to go upon; you cannot say that the request has ever been made to the masters, and that they have refused the request?—In some cases they have.

1132. And you do not know the grounds on which they have refused it in those cases?—No.

1133. Sir *Philip Egerton.*] You stated, I think, that a frequent cause of accident was the fall of roofs?—One of the causes.

1134. Who supplies the props for supporting the roof?—The master.

1135. And at whose expense are those props put up?—The man has to set his own props.

1136. But the master finds the props?—Yes.

1137. Is that operation of putting them up one which takes some time?—Yes, it takes some time.

1138. Do you think that the miners are apt to neglect that, in order that they may have more time for hewing?—Some perhaps might, and some are not able to distinguish when there is danger.

1139. But with reference to putting in these props, do you think that the miners insert them as often as they ought, or do they run hazards in order to have more time for hewing?—I do not think they do as a body.

1140. Have you any shaft accidents?—Yes.

1141. From the working gear being out of order, or from coal falling off?—From various causes.

1142. What ropes do you use, hemp ropes or steel?—Steel.

1143. Do they employ safety catches in your mine?—No.

1144. Have you no precautions against overwinding?—No.

1145. How often are your engines inspected?—I cannot say.

1146. Have you had any accidents from explosions of boilers, or other machinery accidents?—Not immediately where I am.

1147. Do you use water-gauges?—Yes.

1148. Mr. *Bromley.*] You state that in cases of accidents where coroner's inquests are held the men are dissatisfied, and they think that they themselves should be on those juries?—That some of them should.

1149. Of whom are the juries composed at present?—Shopkeepers, and anything but colliers.

1150. People who have no knowledge of the management and working of a pit, who know nothing about it, in fact?—People who know nothing about it.

1151. Mr. *Woods.*] The Act of Parliament contemplates special rules as well as general rules; I believe that one of the special rules is

Mr. *P. Dickinson.*

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that a sufficient number of props be provided; is not that so?—Yes.

1152. As to the pay, is it the universal custom in your country to pay once a fortnight?—I cannot say it is universal, but the majority pay once a fortnight.

1153. Do you know any place that pays once in three weeks, or once a month?—As a general thing, they do not pay once in three weeks, or once a month, but now and then they may.

1154. Can you name any colliery that does pay once in three weeks, or once a month, in your neighbourhood?—Occasionally one will.

1155. Can you name it?—I have worked in one; it is Robert James' Colliery.

1156. The play Monday comes once a fortnight, does it not?—Yes.

1157. It is by arrangement, that is to say, by the general concurrence, I suppose, of the masters and men that there is a play Monday once a fortnight?—It is understood, I believe.

1158. Would you say that that was the reason why the pay is once a fortnight?—No.

1159. Can you say that that is not the reason why it is once a fortnight?—No.

1160. There is one play Monday in the fortnight and one pay-day in the fortnight; that is the case, is it not?—Yes.

1161. Mr. *Greenall.*] With reference to the coroner's inquests, there is a good deal of feeling, is not there, amongst the workmen on that subject?—Yes.

1162. Have you ever known, in your own experience, any verdict that has seemed to you to be contrary to the evidence given before the coroner's inquest?—I cannot say exactly that I have.

1163. Mr. *Foster.*] Does not the inspector of the district always attend coroner's inquests, to watch the mining evidence closely on behalf of the survivors of those who have been killed?—Generally he does, I believe.

1164. *Chairman.*] How is the play Monday generally employed in your neighbourhood; what do the workmen do with it?—Most colliers, like myself, take time to fettle up their tools, and to provide what they will want during the fortnight.

1165. And there is a good deal of drinking, I suppose, in some cases?—I am sorry to say there is.

1166. Is there anything else which you would like to tell the Committee, that we have not asked you about?—I am not aware that there is.

Thursday, 22d March 1866.

PRESENT.

Mr. Bromley.	Mr. Greenall.
Mr. Bruce.	Mr. Kinnaird.
Mr. Fawcett.	Mr. Neate.
Mr. Ferrand.	Mr. Woods.
Mr. Wm. Orme Foster.	

CHARLES NEATE, Esq., IN THE CHAIR.

Mr. WILLIAM BAXENDALE, called in; and Examined.

1167. *Chairman.*] WHAT are you?—A working miner.

1168. Where are you working?—I am working for Robert James and Company, at Ince, near Wigan.

1169. How long have you been working there?—About six months.

1170. Before that were you working at Lord Crauford's mine?—Yes.

1171. Have you always worked in Lancashire?—No; I have been about seven years in the county of Durham.

1172. You have chiefly worked in Lancashire, have you not?—Yes.

1173. For how many years have you been working in Lancashire now, without interruption?—Nearly five.

1174. Where did you begin working?—I began working at first when I was a child, at Black Rod, in Lancashire.

1175. At what age did you begin?—Before I was five years of age.

1176. Who put you to work then?—My father.

1177. What did you do then?—I just knocked about as an errand boy for my father for a time.

1178. Did not your father take you down into the pit to accustom you to the mine?—Yes; I did nothing at first for a few months.

1179. Where you are now, are there many boys employed?—I should think there are none under the stipulated age of 14 or so.

1180. At other mines where you have been working, were boys employed?—A great many.

1181. Speaking only of the mines where you were working yourself, before you came to the mine where you now are, were many boys employed in those mines?—Yes.

1182. How many boys altogether?—I should think that in the mine where I was working before I came to my present place there were 60 or 70 or 80.

1183. And how many men?—From 100 to 120.

1184. Do you mean 60 or 70 boys working underground?—Yes.

1185. To about 120 men, you say?—Yes.

1186. When you speak of boys, up to what age are you speaking?—From 10 up to 16 or 17 or 18.

1187. In the mine of which you are speaking, how many boys do you suppose there were under 12 years old?—I cannot tell exactly; perhaps 16 or 20.

1188. You are aware, perhaps, that an alteration in the law was made in the year 1860?—Yes.

1189. Have you noticed any difference in the employment of boys before and after that time?—Yes.

1190. Were the regulations of that Act complied with where you were working?—I do not suppose they were, because boys are chiefly employed by the owner of the colliery at the small age of 10. They are not then large enough to work for a collier, and so they are introduced at first chiefly by the coal proprietor.

1191. My question was directed to this, whether, after that Act, a greater attention was paid to the ages of the boys than before?—Of course those people who had a strong notion or inclination to take the boys into the pit were prevented, and it has made a great alteration in that way.

1192. If a man wants to get his boy employed in a colliery in your district, what has he to do?—He first takes him to the underlooker.

1193. What questions does the underlooker ask?—The underlookers are not very particular about it in most places.

1194. Will you speak of the places which you know; have you the means of knowing what the practice was at the place where you were before, Lord Crauford's colliery?—I have heard them say that sometimes they could read and write, and sometimes not.

1195. Were they satisfied with the account that the father gave?—Yes.

1196. Supposing that the man who brought the boy, said that he could read and write, did not the underlookers ask for any proof?—There is a difference in the look of boys, and if a boy looks very young, of course they object; and in some cases they compel the man to get a register of the age.

1197. But the rule is to take the statement of the father, or the man who brings the boy; is that so?—Yes.

1198. Have you any reason to suppose that that statement is always correct?—No, I do not think it always is.

1199. Does

Mr. *W. Baxendale.*

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Mr. *W. Baxendale.*

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1199. Does the miner or father sometimes say that the boy is older than he is, in order to get him in?—Yes.

1200. From your knowledge of the boys in that mine, do they know how to read and write?—Some of them—not all.

1201. Of course you read and write yourself?—Well, in a very inferior way.

1202. How did you learn to read and write?—I have learnt to read and write since I came into manhood.

1203. With regard to the mine you have been speaking of (not the mine where you are working now), what was the distance of any school from that mine?—There were Sunday schools within half a mile or so.

1204. Any night school?—I do not know of a night school, except that some parties for the good of the lower class, took upon themselves to take boys to school.

1205. How many hours did the boys work in that mine?—I have known them in the pit 14 hours, and I have known them 10; they vary; sometimes they get out sooner than at other times.

1206. I understand you to say that there are no boys where you are now?—There are none under the stipulated age of 14, or so.

1207. Do you mean that the employer will not receive them under 14?—No, he is not very particular, I dare say; but it is a mine that requires strong lads.

1208. What are the boys employed for chiefly in that mine?—Drawing the coals away from the men.

1209. They are what you call harriers?—Yes.

1210. What is the first work a boy is put to?—Trapping, or door-keeping, or rolly hooking, as we call it, that is to say, coupling the tubs one to another.

1211. Are boys less employed now in door-keeping than they were?—Yes.

1212. The drawers open the doors, do not they?—In most cases.

1213. Is there a difference between the boys that are employed directly by the manager of the mine and those that are employed by the workmen?—Those that are employed by the workmen are older; they have to be bigger because the work is harder.

1214. What is the reason of the work being harder in the mine where you are now, so as to require stronger boys for the workmen?—It is a small pit, not many men work in it; there is no galloway driving, and no rolly hooking.

1215. By allowing driving, you mean pony driving, do not you?—Yes.

1216. The drawing is done by strong boys?—Yes; young men.

1217. Speaking of the mine where you were before, are there many women employed there?—Yes, a good many.

1218. How long did the men work in the mine where you were before?—It is the rule to go down at five o'clock in the morning, or betwixt that and six. They are not allowed to return again till twelve or from that till one, but sometimes they stop down till two, three, or four. It varies according to the quantity of the work done by the men.

1219. How long does a boy work?—Sometimes till half-past five. If the boys can get their work done a bit sooner, they get out sooner.

1220. When the working miner comes away, he leaves a certain amount to be drawn by his boy; is that the case?—Yes.

1221. Supposing a miner comes out at three, leaving a certain amount of coal for the boy to draw, when the boy has done that, what else has he to do?—He has nothing else to do except to go to bank.

1222. Mr. *Bruce.*] Do you wish any alteration in the law with respect to the employment of boys at an early age underground?—Yes.

1223. What alteration would you suggest?—I would suggest that none went into the mine under 12 years of age; and that from 12 to 14 they should work eight hours; and I would have some compulsory statute for their having schooling two hours a day for at least five days a week.

1224. Do you mean that, whether a boy could read or write, he should not be allowed to go underground till he was 12 years old?—I would not like it. It is the law now that he is to read and write before he goes in, and we do not wish to alter the statute as to that.

1225. At present a boy is not allowed to go underground till he his 12, unless he produces a certificate that he can read and write, or that he is attending a school a certain number of days per week. Do I understand you to wish that the law should be altered to this effect, that under no circumstances whatever, whether he could read or write or not, should he be permitted to go underground till he was 12?—He should not, if he could not read and write.

1226. Then you wish to leave the law as it stands?—Yes.

1227. That is up to the age of 12?—Yes.

1228. From 12 forward what change do you wish in the law?—From 12 up to 14 I should like the eight hours system for boys, and that they should go to school two hours a day for five days a week.

1229. That is to say, they should not be permitted to work between the ages of 12 and 14, unless they went to school for 10 hours a week?—Yes.

1230. How could that be managed practically; how could a boy work eight hours a day and attend school two hours a day, each working day?—They go to work at the stipulated time, which would not be later than six o'clock in the morning, and of course if eight hours was the time for his work he would have done at two o'clock, and then he might attend a school two hours out of the next four or five hours, I should think.

1231. Is it not the rule at nearly every school that they meet at two in the afternoon, and generally only stay for two hours, or at most two and a half hours so that the boy would not be able to get from his work and clean himself and go to his school in proper time?—But there are night schools.

1232. Are there in fact night schools?—Yes in some places, and I believe that such a law would be a means of creating them where there were none.

1233. Do not you know as a general rule that the night schools are very inferior to the day schools?—Yes, I know that.

1234. That full grown men and boys are so mixed together in the night schools that although they are better than nothing, they are inferior to day schools?—We most of us admit that, but still we consider that it would be a step in the right direction, it would be better than none.

1235. When

1235. When was it that you were working at this pit, at which you say there were from 16 to 20 boys employed between 10 and 12 years old?—I believe I left that at the end of last August.

1236. Were there, at that pit, any boys that, in your opinion, were under 10 years old?—I cannot say.

1237. Were there, in your opinion, any boys between 10 and 12 who could not read and write?—Yes.

1238. Do you think that the owners of that colliery were not sufficiently active in seeing that the law was obeyed?—I do not suppose that the subordinate offices were; of course it is put to them.

1239. But the owners have to trust simply to their agents, I suppose?—Yes.

1240. Have you any reason to know whether the agents received directions from the owners strictly to obey the law?—I do not know.

1241. What was the feeling of the men in the colliery with respect to the employment of these children between 10 and 12, who could not read and write?—Generally, they are in favour of the Statute which we are seeking, but of course there are a few who would not care how they took their children, so that they could make something out of them.

1242. But you think the greater part of the workmen are anxious to see the law obeyed?—Yes.

1243. And I need hardly ask whether the greater part is also by far the most respectable part of the workmen?—Of course.

1244. Did this respectable majority of men ever do anything to assist in procuring obedience to the law, by objecting to the employment of children under 12 who could not read and write?—Do you mean in the way of speaking to the owners?

1245. Bringing the matter to the notice of the agent or the owner, where children were improperly employed?—I have not known such a thing; it would be detrimental to the position of the workmen if they did it.

1246. Do you think that if a respectable man like yourself were to go to the owner and say, "There are such and such boys employed at this pit, contrary to the law, under age," and were to call upon him to see that they had their proper schooling, he would not attend to it?—I should doubt it.

1247. Have you not found in your experience, that a really good, steady, workman is greatly valued by his master?—Of course he is more valued than one that is not.

1248. Such workmen are not so very plentiful that a master likes parting with them?—A steady workman has more privileges, of course.

1249. Do you think that if half a dozen steady workmen were to go to the master and call upon him to take proper steps to protect the children of the colliers from the selfishness or ignorance of their own parents, he would not act with those steady workmen?—I believe that if three or four went to him the other way he would take them against the five or six steady men.

1250. In fact that the master would rather go with those who call upon him to break the law, than with those who call upon him to maintain the law?—That is my opinion.

1251. Then you have not a very good opinion of the employers?—Of some of them I have; there are two kinds of employers, in the same way as there are two kinds of workmen.

1252. Do you think that the generality of employers would act in the way which you have described, and listen rather to the suggestions of the bad workmen who called upon them to break the law, than to the suggestions of the good workmen who urged them to see the law obeyed?—Of course the good workmen do not like to lose their situations; in fact, for myself, if I were tired of a situation at a colliery, I would rather leave it than be turned off, and I do not like to interfere in such things with the masters.

1253. But this is a matter that affects the interests of the workmen more than it affects anybody else, does it not?—Of course.

1254. And do you mean to say that the workmen are so utterly helpless, that they are not able to help themselves in this matter?—I do; without disputes, and strikes, and such things.

1255. You say that the present law is not obeyed, and you want to have new provisions introduced in a new law; what measure would you recommend, in order to secure obedience to this new law?—I think that there should be a statute for the boys to get a certificate before they were set to work, and that the inspector who inspected the county or the district, should keep a register of them on the register book. The boy or his father, whichever it might be, should get the certificate, and send it to the inspector, and the inspector, in the course of so many hours, should return it again to the boy, and that should be a sufficient guide for the owner to employ him. The certificate being the boy's property, the owner should not retain it, but should give it to the boy again, so that if any cause led him to leave that colliery, it would be a protection for him at another.

1256. The masters are now bound to require a certificate, and to register the certificate, are they not?—Yes, but it is violated, and if an inspector or some other person was appointed for that purpose, it could not be neglected.

1257. But how many inspectors do you think it would be necessary to employ, in order to visit all the collieries underground, and see that there was no violation of the law, because you will remember that you are not dealing with Lancashire only?—Just so. That is a question that I am not prepared to answer, but no doubt it would take a great many more than there are.

1258. And all this, because the workmen have not the courage themselves to see that the masters obey the law and protect their children?—It is not only that. If the men were to do anything now, it might cause disputes and strikes, and I think that we could avoid strikes if we had the statute; it would prevent them in certain cases.

1259. And there must be the creation of an army of inspectors?—Of course the inspectors should do their work, as far as that goes.

1260. Because the workmen will not do their own?—The workmen would be assisted by the inspectors.

1261. Are there any women employed about the colliery where you are working at present?—There are four.

1262. On the surface?—Yes.

1263. What ages are they?—There is one about 40, and the other ages vary down to 18.

1264. Are they unmarried?—The one who is 18 is unmarried, but the one of 40 is married.

1265. What would you wish to see done about

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about the employment of women at the pit's mouth?—I think it would be something respectable, not only for the women, but for the country also, if they were removed.

1266. You think that being employed in that way has a bad effect on the characters of the women?—Yes.

1267. And you would have it prevented?—Yes.

1268. You know that women are employed in a great many ways that all of us would rather not see them employed in, but life must be sustained?—That is true.

1269. Would you be prepared to forbid not only this employment, but also all other employments which we could consider to be unsuitable to the sex?—I do not think that any other kind of work is so degrading to women as working on the pit bank, seeing the way that they are dressed, and so on.

1270. Have you had experience of any other sort of work for women, such, for instance, as working in gangs with men in the agricultural districts?—No.

1271. You do not know what effect upon their manners and morals that system has?—No.

1272. If Government were once to begin in this way to prevent the employment of women, they could not stop at mines, but they would have to go on to every other kind of labour where the same effect followed; is not that so?—I remember the time when Government interfered to stop their working in the mines, and I do not think that there was more degradation then than there is now in their work.

1273. Do not you think that there is a certain amount of protection to the women now in being in the open daylight in the presence of the superiors, who are constantly on the surface, and that that constitutes a difference between working above ground and underground?—Of course they are not so closely confined in all cases at the present time as they used to be.

1274. Mr. *Fawcett.*] Women are never employed in South Yorkshire, are they?—I cannot speak exactly about South Yorkshire; I would not like to speak upon anything that I do not know.

1275. Mr. *Foster.*] With respect to the employment of boys from 12 to 14 which you suggest should not be for more than eight hours a day, you say that they go down at six in the morning, you would not wish them, I suppose, to work for eight consecutive hours without any stoppage for meal times?—No, that would be impossible.

1276. Therefore, their working for eight hours would necessitate their being underground for rather more than the eight hours?—I would not like that.

1277. Do you mean then that they should not be underground more than eight hours?—Yes, altogether, not more than eight hours.

1278. Stopping from one to two for dinner, say; do you stop an hour for dinner?—In some places they do not stop at all; only just take their meat, and eat it as they can.

1279. They must, then, appropriate their own opportunity?—Yes, of course.

1280. I suppose the men could not continue to carry on their operations underground without their boys?—No, not without boys; they would have to take men, of course, in their places.

1281. Therefore, in fact, when you say that their work would not be carried on without the boys, that is tantamount to saying, that after two o'clock, your own work (the miner's work) must necessarily cease, if your suggestion about the eight hours is carried out?—Yes.

1282. So that it would be tantamount to the miners only working eight hours a day?—Well, if the miners will work eight hours, they will have plenty; I have plenty with six hours, for my own part.

1283. You admit to the Committee, then, that the fact of the boys working only eight hours a day would, as a matter of course, limit the colliers' work to that number of hours?—Of course, or else they must have a relay of boys.

1284. Mr. *Woods.*] You say, I think, that you work six hours?—No, I say that I have quite plenty with six hours' work.

1285. Will you be good enough to tell the Committee how many boys there are at your present pit?—None.

1286. At Lord Crauford's pit, how many boys would there be?—From 60 or 70, up to 80.

1287. And how many men?—One hundred and twenty, I should think.

1288. How many women?—I cannot say exactly; 14 or 18.

1289. One of the Members of the Committee asked you a question as to the labour underground; you thought both the labour underground and the labour above-ground prejudicial to the women, I think?—Yes.

1290. Was not the labour underground much more severe by reason of the small space in which the work had to be carried on than the labour above ground?—In some mines, of course, it was, that is to say, in these mines.

1291. What is the average height of the mines in your district?—They vary from two feet eight up to six and eight feet.

1292. There is one mine that would come up to six or eight feet, I think?—Yes.

1293. Probably that is Mr. James's mine?—Yes.

1294. But that mine, I believe, is very little worked in your neighbourhood?—Mr. James works it.

1295. Probably 50 or 100 colliers are employed in the other mines to one collier employed in that?—Perhaps 40 or 50, I dare say.

1296. If the women had to work in a space about three feet high when they were down in the mines, I believe we should all be agreed that was a very unfit place for women to work in?—Of course it was; but then a three feet mine is as scarce in our district as a six feet mine.

1297. What should you say is the average height of the mines of the Wigan coal field, excluding the one mine which is six feet high?—Four feet high, or three feet six inches.

1298. The women would have to work in a recumbent posture in a mine four feet high?—Yes.

1299. You propose a restriction to the age of 12 years, I believe; the boys should not go into the pit before they are 12 years old?—Yes.

1300. Is there any restriction in respect of the age of boys in other trades in your neighbourhood; in cotton factories, for instance?—Yes. If I understand the law there, a boy is not allowed to go in under 13, only for short time.

1301. What is the earliest age at which a boy is allowed to go into a factory, is it nine?—I cannot tell.

1302. From

1302. From nine years of age to 13 years of age, those are called the short-time boys?—Yes.

1303. In other trades besides factories is there any such restriction as you propose; for instance, amongst carpenters, stonemasons, bricklayers, and agricultural labourers?—But a boy of nine years of age is not capable to do anything with bricklayers, or joiners, or stonemasons, and in fact they do not take the boys as apprentices till they are 14, as far as my knowledge runs.

1304. But there is no restriction, is there, as to the age at which a boy should be employed?—Not that I am aware of.

1305. Will you tell the Committee at what hour the boys go down to the pit in the morning now?—Generally from five to six.

1306. With their employers?—The boys with their employers. The employer has to go of course in his own direction and meet the underlooker or foreman for his instructions, at a certain place at the bottom.

1307. By "employer," you mean collier in your last answer, do not you?—Yes. Sometimes the collier goes without the boy, and then he follows him when he comes.

1308. Can you give us any information as to what proportion of the boys who were employed at the pit at which you formerly worked were employed by the colliers, and what proportion by the owners?—I cannot give that; but a vast number more were employed by the colliers than by the owners; there was a precious amount of rolly hooking and so on, and that takes a number of small boys to do the work.

1309. Mr. *Kinnaird.*] With reference to the women, have you noticed a great improvement in the women generally since they have been forbidden to work in mines?—Yes.

1310. There has been a perceptible improvement in character in the women in their families, you think?—Yes, in their moral character.

1311. I suppose that working in the mine, or even at the pit, dressed, as you say, like men, quite incapacitates them for their domestic duties?—Yes, of course.

1312. They are unfitted to take care of the children?—Yes.

1313. And unfitted to do all that a working man requires in a wife?—Yes; and the elder women, that are becoming mothers, cannot forget their old habits.

1314. But the young women are greatly improved, you think, since that Act was passed?—Yes.

1315. Is it the general feeling among the miners themselves that the working of women, at all events in that way, ought to be given up?—Yes. There are a few exceptional men that would rather go to public-houses, and so on; but then they are isolated cases.

1316. And there are cases of men who are idle, and who are maintained by the work of the women?—Yes.

1317. And those are the parties who would be favourable to maintaining the present system, you think?—Yes.

1318. But it has an unmistakable demoralising effect upon the women, in your opinion?—Yes.

1319. With reference to boys, I think I understood you to say, that you thought six hours hard work enough for a man?—Yes.

1320. And therefore you think that eight hours hours (stopping for half an hour during that time) much as boys ought to be allowed to work?—Yes.

1321. Is there any practical difficulty in reducing it to eight hours; could not the men be down in the pit first, and get the work ready for the boys?—Yes, that is done in the counties of Northumberland and Durham by the men regularly.

1322. A man goes first, and does his part of the work, and the boys go in later; is that what you mean?—Yes.

1323. And therefore there would be no practical loss to the employers in shortening the duration of the work of the boys, but, under proper management, the practical effect would be to get as much work done?—I believe it would be beneficial to the employer in the end, and, in fact, in a very short time.

1324. Have you seen a large number of boys employed in pits in your time for many hours in the day?—Yes.

1325. Their health suffers, does it not?—It does.

1326. It prevents their growth, does it not?—Yes.

1327. They are more sickly from overwork than the population ought to be?—Yes.

1328. Mr. *Ferrand.*] You say that there are a number of women employed on the surface at many of the collieries in Lancashire?—Yes.

1329. Are those women, generally speaking the wives and daughters of colliers, or the widows and orphans of colliers?—There are some of them wives and daughters of colliers, and some widows and orphans of colliers, and some of them that have nothing to do with colliers.

1330. Do you generally find that the husbands and fathers of these women whose relations are colliers, are men that spend a portion of their wages at public-houses?—Yes.

1331. Therefore do you think it would improve the character of the colliers themselves, if women were prohibited from working at the collieries?—I do.

1332. Their work is shovelling coals, is it not?—Yes, filling coals, wheeling them away from the heaps to the boats or waggons, and riddling them.

1333. Do these women work much among the carters that come for coals?—In our neighbourhood we are not much plagued with carters.

1334. But where they have carters coming, have the women much to do with them?—Yes.

1335. Is much bad language used by these carters?—Yes.

1336. And you think, I suppose, that that has a degrading effect upon the women?—Yes.

1337. And you wish to see it prohibited by Act of Parliament?—Yes.

1338. You have been asked as to night-schools; what time do the night-schools commence in the colliery district?—They commence from six to seven o'clock, and close at eight or nine.

1339. What time do the boys, working at these collieries, rise of a morning?—If they live near the pit they will will have to rise at four, and if they live further off they will have to rise sooner.

1340. If a boy rises at four o'clock in the morning, and works eight hours in the pit, you do not think, do you, that he would be fit for schooling between six and nine in the evening?—It would be better if he could go sooner, for it would take him a considerable time to go home and clean himself and get refreshments.

1341. Is the work that the boys have in the pits laborious?—Some of it, not all; it tosses them about.

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1342. Do not you think, that a boy having that work, must be thoroughly tired at six o'clock in the evening, and fitter for bed than for school?—Yes, but the boys are accustomed to knock about, and they do not like to go to bed before eight or nine, though I do know some that are in bed at seven.

1343. If you know boys that go to bed at seven, how can they attend school in the evening between six and nine?—Of course they cannot if they go to bed at seven.

1344. Suppose their parents send them to bed at that hour so that they may be refreshed and fit to rise at four o'clock the next morning?—It is generally so.

1345. Are the boys ill-used in the pits?—In some cases.

1346. Are they ill-used by their parents?—Sometimes, but generally speaking it is the parents who have the most feeling for a child.

1347. When the boys are ill-used in a pit, is it generally done, do you think, by men not their parents, or by the parents themselves?—Of course it is generally done by men not their parents.

1348. You said that the husbands and fathers of these women are men who are addicted to drinking; do many of the colliers themselves (I mean what you call the respectable portion of the colliers) at the present day drink a portion of their wages?—There are too many of them that do.

1349. What do you mean by "too many;" do you mean a large number?—Yes, I believe the majority of them do not look to their own interests; of course there are exceptions.

1350. You have alluded to strikes taking place at the collieries; do you approve of strikes?—I do not.

1351. Mr. *Bromley.*] Do you think that the earnings of a family would be much diminished if women were no longer permitted to work in the mines?—In some families, of course, that would take effect; but I would give them time to look after other labour.

1352. You do not think that, practically, it would lessen the earnings of one family?—No, not after a time.

1353. You think, do you, that the men would work more, instead of the women?—Of course they would, if they had any feeling of decency and respect, they would want something to maintain them.

1354. *Chairman.*] When you want a boy for a drawer, or a harrier, to whom do you go?—To the underlooker.

1355. Does he inquire as to the age of the boy that you want?—It is generally the case that the man does not show the age of the boy, because the boy will show himself.

1356. But you cannot get a boy without the permission of the underlooker, can you?—No; nor a man either.

1357. Whom do you make your bargain with; supposing it is a boy of your own, of course you make no bargain with him?—No.

1358. If you take any other boy, you make a bargain with him?—Yes.

1359. And you pay the boy, or the parents?—Yes.

1360. Does the boy bring his own dinner, or do you give him part of yours?—No, he brings his own.

1361. Mr. *Ferrand.*] Do you often find the colliers endeavouring to get their boys into the pits under age?—Some do, and the boys come in in this way; one boy, of course, likes to follow the example of another. If one boy gets into the pit before he is the proper age, other boys want to do the same. I have a boy now of nine who wants to go into the pit, just because he sees other boys that go.

1362. *Chairman.*] A boy is occasionally beaten by the colliers, I suppose?—The boys do get beaten.

1363. Whom does the boy complain to?—To his father generally, I should think.

1364. Does he complain to the overlooker of the mine?—Not so often.

1365. Have you known cases of boys being much ill used?—No, only bits of taps, and such like things; it is not allowed according to the special rules, or the supplementary rules, in any colliery.

1366. It is forbidden by the rules, you mean, for a collier to strike his boy?—Yes.

1367. If a boy complains, is his complaint taken up?—I cannot say that I recollect any such case.

1368. Speaking not merely of the mine where you now work, but speaking generally from your knowledge of mines, are you satisfied of the competency of the mining officers to do their duty?—There are some not competent.

1369. There is no certificate of their competency required, is there?—No.

1370. Is there any feeling that it would be desirable that they should have a certificate of competency?—Yes, we know that there are parties who are not competent for the work, and we think that a statute to that effect would do good, and an examination too.

1371. Which class of the mining officers do you think the least competent?—The firemen, of course, have the most responsibility upon them.

1372. That is the class whose competency is of the most importance?—Yes, so far as the workmen are concerned directly.

1373. According to your experience, have the firemen that knowledge of the symptons of an approaching explosion that they ought to have?—No, I do not think they have, not most of them.

1374. Accidents arise of course sometimes from the carelessness of the firemen?—Yes.

1375. But do you think that accidents also arise from the ignorance of the firemen?—Yes.

1376. That is to say, that those firemen do not know the proper signs that an explosion is coming?—Yes.

1377. Mr. *Bruce.*] Most of these firemen have been originally workmen, have they not?—Most of them.

1378. Are they generally fairly selected as being the best and most trustworthy?—I do not suppose they are.

1379. Is there favouritism there as elsewhere?—Favouritism, and something of another kind; I mean that that man is chosen that will be most obedient to his superior officer, and that will jump at any call from him, whether it is right or wrong; a man that dares to come forward and contradict an overlooker, in most cases is not a man for the place.

1380. Do you consider yourself fit to be a fireman?—Well, I have served nearly three years of it in my time.

1381. You have been one?—Yes.

1382. Would you like to pass through an examination by a Government officer?—If I was wanting a situation I would, but I am so adverse to firemanship that I would not seek it.

1383. But

1383. But if you wanted a situation you would not object; is that so?—I should not.

1384. Do not you think that there are a good many workmen who know their work throughly and yet would be rather staggered by an examination by an inspector?—I tnink that if a man would be staggered by a thing like that he would be staggered by the whole business.

1385. Do not you think that there are a great many men fit for the work who yet could not go through the form of an examination?—I think if a man is really fit for the duties and is acting with justice and truth, he does not need to fear an examination.

1386. Mr. *Fawcett.*] Do the firemen get higher wages than the ordinary colliers?—No, they generally get less, and that leads to the firemen generally being inferior men.

1387. What are the wages of firemen generally?—I dare say they will vary. I know some firemen with wages as low as 3*s.* 6*d.*, and I know some with wages as high as 4*s.* 6*d.*

1388. If the wages are less, it is not a desirable appointment, I presume?—In some cases it is not very hard work.

1389. Did you consider, when you occupied the position of fireman that you were better off than ordinary colliers?—I did not.

1390. Then if it is an inferior position to that of the ordinary collier, you will not get men go in for an examination for it, will you?—But the work was not quite so laborious.

1391. But reckoning the less laborious nature of the work, do you consider that on the whole a man is better off not being a fireman than working as an ordinary collier?—Generally speaking, the men that are firemen are inferior men for getting coal; I mean as to having their faculties about them: there are some men that can get as much money in that way in one hour as others in two.

1392. Do you consider yourself, without praising yourself, to be at all above the average in your capacity of getting coal?—I do.

1393. Then, if you say that a fireman is not a good workman in the way of getting coal, why did you take the position?—At that time I had an ambition to get that position.

1394. Why did you relinquish the place?—I relinquished it because I considered that whenever an accident happens, the firemen are forced to be brought to the test, and my principles led me, wherever I could see an inferior point, to speak about it, and, as I said before, that does not suit; it is not very pleasant to deal with the underlooker in that way.

1395. Then you really gave it up, because you felt it uncomfortable to do your duty?—That is it.

1396. You were thwarted in doing your duty; that is one chief reason that induced you to give it up?—Yes.

1397. Mr. *Bromley.*] This position of a fireman is a more responsible position, of course, than that which you now hold?—Yes, it ought to be.

1398. And yet you say, that the men who are selected for this duty are not selected always for their intelligence and cleverness?—No; they are not.

1399. As a general rule, you consider, as I understand you, that these men are selected from amongst the men whom the overlookers consider most likely to do exactly as they wish?—Not in all cases; but generally, I believe, it is so.

1400. Mr. *Foster.*] Who would be the largest sufferer from any neglect of duty on the part of a fireman; pecuniarily I mean?—If a man gets killed through any negligence, the widow and the orphans are the largest sufferers.

1401. I say pecuniarily?—Of course the employers will be sufferers as well.

1402. Would they not be likely to put in the very best and most trustworthy man that they can find for the office of fireman?—Whatever be the reason, we see daily that it is not so.

1403. It is a very serious affair for the owner of a mine to have an explosion in a mine, is it not?—Of course it is.

1404. And he would regret it very much for the sake of the men?—I have not the least hesitation in saying that no coal owner wants an explosion, or any other accident.

1405. He would naturally fear a pecuniary loss in the stoppage of his pit?—Yes.

1406. Therefore it is natural for him to employ the most trustworthy man he can find for the office of fireman?—The owners run risks, and trust to Providence.

1407. Mr. *Woods.*] What is the mode of selecting the firemen?—I do not know that there is any particular mode.

1408. Who chooses them?—The underlookers choose them.

1409. You said, I think, that the wages of a fireman were frequently less than those of a good collier?—Yes.

1410. And that you had yourself been a fireman once?—Yes.

1411. Does the firemanship seem to lead to an underlookership?—Yes, sometimes.

1412. To be a fireman seems to be on the road to preferment?—Yes.

1413. I suppose the object for which the firemen are chosen is the preservation of the property of the colliery?—Yes, and the men's lives.

1414. You told us that the wages of a fireman frequently were 3*s.* 6*d.* a day, and even 4*s.* 6*d.* a day?—Yes.

1415. Will you tell the Committee what the wages of a collier are?—It varies. Some men are qualified to get as much again as other men. And then again, the work varies. There is some work where one man can get 1*s.*, while another man can get 3*s.* in the very same kind of work.

1416. You are not able to give the Committee an average?—I cannot. I should not like to work as wages are going now for less than 5*s.* or 6*s.* a day. If I had less, I should be leaving that place, and going to another.

1417. Will you tell the Committee how many hours it would take per day to make 5*s.* or 6*s.*?—What I mean is, to tell the Committee that I am satisfied if I have worked six hours, and if I work any longer there is something detaining me; we have bad work in one part of the day, and good in the other; it is not regular work.

1418. How many days in the week do the colliers make (that is the local phrase, I believe) in the Wigan coalfield, at 5*s.* or 6*s.* a day?—I reckon about five days a week for my work.

1419. Ten days in the fortnight?—Yes; sometimes I work 11, sometimes eight or nine days; we are stopped from working by break downs and accidents, and so on, sometimes.

1420. How many days in the fortnight would a fireman make?—The general rule is 12; and in some cases I have known a man make 16 days; that is, by working both night and day.

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1421. When he makes 16 days in a fortnight, of course he has overtime for the extra days?—Yes; in most cases.

1422. Mr. *Ferrand.*] How many hours do you call a day's work for a collier?—There are some work more, and some less.

1423. But what do you call a fair day's work?—Eight hours.

1424. Then, if you work nine hours you add that on to an extra day, I suppose?—No.

1425. Are not the accidents in the colleries generally caused by the negligence of the men?—No, not by the negligence of the colliers; I dare not say that. When an accident takes place by explosion, or anything of that kind, it is a difficult thing to get at the cause of it; because, generally speaking, wherever the blame is, or is suspected to be, the men are dead, and they cannot tell the tale.

1426. Is it not your opinion, that where explosions take place, they are generally caused by the negligence of the men in smoking, or opening their lamps?—In some cases that might be so; but as far as smoking is concerned, I do not think that there is much of that now; because men have been punished for it, and it is the same with the lamps, but there are men who tamper with the lamps.

1427. Is it not the interest of a colliery proprietor to prevent, by any means in his power, explosions, or accidents in his colliery?—Of course it is.

1428. From whom do you propose that the certificate of competency for firemen should be got; who should grant them; to whom should the men apply?—I should think that if the inspector and the owner of the colliery examined them it would be sufficient.

1429. You do not expect that an inspector of collieries should undertake the examination of firemen, do you?—That depends, of course, upon what the Government think, if they intend to make a statute for it. I would not like to say who should do it, but it should be done by some competent person.

1430. If you come before a Committee of the House of Commons to state your grievances, do not you think you ought to be able to point out to the Committee the way in which they should be redressed?—As far as my knowledge leads me.

1431. Do not you think it would lead to an enormous public expense if inspectors had to examine firemen?—It would lead to some expense, of course.

1432. Do you think that the colliers themselves would be inclined to subscribe towards that expense?—I cannot say.

1433. *Chairman.*] Your business as a fireman was to visit the workings when the men were not at work, was it not?—Yes.

1434. Did you do it at night?—In some large collieries it is done at night, and in others which are not large, it is done in the morning.

1435. When do they begin at night?—At the present time they begin at eight or nine at night, and go round the workings.

1436. So that they would be going round from eight or nine o'clock till four in the morning?—Yes.

1437. Were you ever found fault with for not visiting the workings properly?—Yes, once.

1438. By whom were you found fault with?—By the underlooker; but I believe there was something behind.

1439. Was any accident alleged to have happened in consequence?—No; I had exactly done according to his instructions.

1440. What means has the underlooker of knowing if the firemen do their duty?—Generally the fireman makes a mark in the morning, either the day of the month or some other signal, to indicate that he has been there.

1441. But when he visits a working, does he make any mark to show that he has been there?—He puts the day of the month somewhere or other.

1442. If he did not do that, the colliers would report him, I suppose?—Yes.

1443. Mr. *Bruce.*] You have just said that you would have these firemen examined; but you have also said that it would not be possible to obtain a proper set of firemen without more pay, have you not?—No, I did not say that exactly.

1444. Do you think that the pay is sufficient to secure fit men for the work?—I should not like to take it for the pay.

1445. Do you think that the pay is sufficient to secure fit men for so responsible a work?—No; I do not think it is.

1446. Would you have the statute fix the pay, as well as the examination?—No.

1447. So that the remedy would not be complete?—Yes; I think it would. When a man knew that he would have to stand an examination, I think an inferior man would not apply, and if he was a competent man, of course he would want competent wages. I think that it would work out to its own level.

1448. *Chairman.*] You say that the fireman marks the day of the month at the working?—Yes.

1449. Does he mark the hour of his visit?—No.

1450. Would it be a convenience if he did, so that the collier might know at what time his working had been visited; the collier does not know what course of rotation the fireman follows, if he merely sees the mark showing that the fireman has been there; that does not tell him at what hour of the night he has been there, does it?—It is the general rule or understanding that he takes the air as it comes, and follows it.

1451. If the collier found that the fireman had not been there, do you think he would complain?—Yes.

1452. The men generally do complain in such cases, do they?—Yes.

1453. Were you in the Committee-room when Mr. Dickinson was examined?—Yes.

1454. Did you hear the evidence which he gave about measuring and weighing?—Yes.

1455. Do you agree with that evidence?—Yes; I agree that we ought to have our materials weighed, and that we ought to be paid for them accordingly.

1456. You agree generally with his evidence?—Yes.

1457. Have you anything that you would wish to add upon that point?—He did not come out perhaps quite plainly upon the weight. A question was asked by some honourable member whether there was not a patent machine got up by some one. He did not know anything about that, nor do I; but I think that having the imperial weights is the best system, and for them to be inspected by the inspector of the district.

1458. Have you anything to say of your own knowledge as to the way in which the size of the tubs gets increased?—Yes, I know that the size of the tubs does get increased.

1459. How

1459. How do you know that?—By working with them. They do not increase them all at once, they alter them by degrees; say something like a quarter of an inch in height at one time; they grow gradually; it takes some time for a tub to grow from five or six cwt. to seven cwt.

1460. When you have had a new tub have you ever tested it to find whether it was a little bigger than the old one?—Yes, it causes disputes at the colliery, and then it causes a day or two's play; sometimes we test them by measure, and sometimes by weight.

1461. You suppose that the tub is bigger because it looks bigger?—Yes.

1462. But you have not tried whether it actually holds more than it did before, you merely judge by the eye?—We go further than that, we take the measure of them by the inches.

1463. And do you find that they always measure more than they did before?—Not in all cases.

1464. But it often happens, you say?—Yes.

1465. Is the tub ever less than it was?—No.

1466. Mr. *Bruce.*] You are not satisfied with the present state of the law about the weighing of coal, as I understand you?—No.

1467. You object, first of all, as I understand, to the increase in the size of the tub, which you say is very unfair to the workmen, and you also object to the masters not counting those tubs which have not in the opinion of the banksmen been properly packed; those are the two points, are not they?—Just so.

1468. What change would you make in the present law?—The change that I would recommend, or that I want, is for coals to be paid for by weight.

1469. There might be false weights as well as false measures, might there not?—If the weights were imperial weights, inspected by the inspector of the district, that would prevent it

1470. The Act of 1860 enacts this, that where the persons employed in any coal mine are paid by the measure of the coal or the gauge of the coal, such coal shall be truly measured or gauged; that is one thing which it enacts; and besides that, it makes it lawful for the colliers to appoint a man to be present at the measuring and gauging, in order to see that fair play is done to them; do not you think therefore that the law provides all that is necessary for justice to be done to the colliers?—We do not think so, we have instances to show otherwise.

1471. That is to say, you have instances to show that laws have been broken; but that does not show, does it, that the laws themselves do not provide all that is necessary; a law may be passed, for instance, to prevent one man from striking another, but that does not necessarily prevent it?—But I would ask, does not the law make it optional whether it is to be by weight or measure?

1472. Yes; but the law punishes for giving either bad weight or bad measure; I wish to know whether you have ever taken any steps to see justice done to yourselves when you suspected that the measure was false, or that they weighed the coal improperly?—Yes. In one case the man that we had set there was carried off the heap by the owner's servants into the highway.

1473. Did you summon the owner for disobeying the law?—He was summoned.

1474. What was the result?—The result was against the men; we had summoned him for an assault upon the man.

1475. Upon what grounds was the summons dismissed?—I cannot tell exactly. I was not there at the time. Perhaps there is another witness in the room who can state that.

1476. Are you aware that in counties where coal is weighed, there are just the same sort of complaints as you are making against the measure?—I do not know that there are. I have worked under the weight system in the county of Durham seven years and more, and I was quite satisfied with it there.

1477. Have not you heard, what is very familiar to some of us, of applications for further interference, in order to see that the weights were fair and right?—As far as adjusting the weights goes, and their being under the inspector, I have.

1478. Is not measure as capable of adjustment as weight?—Well, I would rather have weight; I have a reason for it, which I will explain, if the Committee wish.

1479. By all means explain it to us?—The coals vary in weight; that is a positive fact. A strong coal will be heavier than an easy one. Of course the workman would be paid for his laborious labour in that case, if he was paid by weight.

1480. The strong coal is found in certain veins?—Yes.

1481. And the men are paid so much a ton, or so much a tub, as the case may be, according to the quality of the vein; is not that so?—Yes; but when brassis comes in, the man does not get so much.

1482. In collieries where there are several veins of coal worked, there is a certain price paid for cutting each vein?—Do you mean in different mines?

1483. No, in the same pit?—We have none of those cases; they are generally all one vein.

1484. Is not, practically, the price paid for the coal determined by the quantity of coal which one day with another the collier can cut?—I do not exactly understand the question.

1485. If a vein was of such workable coal that a man could cut five tons a day (I am merely supposing the case), do you think he would get as much payment per ton as if it were of such a quality that he could only cut three tons a day?—Of course, the stronger the seam the more he would have for cutting it.

1486. Does not that meet the case which you mentioned; you said that the coal which paid most was the hardest coal to work, and that therefore the weight system enabled a man to earn a larger amount of wages; but I ask you whether the quality of the coal is not a circumstance well known to all you colliers, and whether your knowledge of the quality of the coal does not determine the rate of wages which you ask for cutting the coal?—Yes; but my opinion strongly is for weight. I think that we should have the most justice by weight.

1487. Mr. *Fawcett.*] With regard to the reasons for which you object to coals being paid for by measurement, I understand you to have two reasons, one being that you are often cheated; and the other being that you do not get sufficiently paid for the strong coals; is not that the case?—The coal generally contains slag, or stone; that in most collieries is allowed to be sent with the coal up to bank, and separated there, and

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that is of a heavier nature than the regular coal.

1488. But am I right in supposing that one of your chief reasons for objecting to being paid by measure is, that you are cheated?—Yes.

1489. Would not there be the same chance of cheating you if you were paid by weight?—No, I do not think there would.

1490. You have the power of placing a man on the bank to check your coal when it is measured, and also a man to weigh it; why do not you place a man there to check it in that way?—I have related an instance of our attempting to do so.

1491. You say that the man in that case was driven off the mine; might not exactly the same thing occur if a man was there to weigh it?—We want an enactment.

1492. But you have an enactment now, and if you could prove that the man had been unjustly taken off the mine the owner could be punished?—Under present circumstances they will not allow the man that we appoint any facilities whatever; not even to go into the cabin, the house where they eat their meals; at least in one case that I know they will not even allow him to go in there. In fact I know cases where weights are used, and they will not even allow the man to have a covering over his book.

1493. As far as being cheated of what is fairly your due is concerned, that applies at the present time equally to the case where coal is weighed and the case where it is measured; because, if you cannot compel your owners to allow you to have a man there, you are just as liable to be cheated when it is weighed as when it is measured; is not that the case?—Yes.

1494. What you want chiefly, therefore, is, not an enactment to insist upon coal being weighed, but to insist upon the arrangement of having a man upon the surface to watch your interests?—Yes.

1495. You say that for a long time a system of cheating has been going on by the increase in the size of the tubs?—Yes.

1496. The men throughout your district are perfectly well aware of that, are they not?—Yes.

1497. When a certain price is offered to you for working, you calculate, I suppose, the amount of wages you think you will get during the week, and if you do not think you will get enough at that price you will not take the work?—When a colliery commences, the tubs are called such and such a weight. At the colliery where I am working the tubs commenced at six cwt., that is six tons to the score of 20 tubs, and they were enlarged some little time back, and the owner came out to us and said it was arranged that they should be seven cwt.

1498. You said, I think, that you would not be content to go on working unless you got your 5 *s.* or 6 *s.* a day?—Yes.

1499. Suppose, owing to the tubs increasing in size, you got less, what would you do then?—We would have to make the best of it.

1500. Would you leave the district?—Supposing a man has a family, he cannot leave at all times, and he has to take the consequences.

1501. You think, as I understand you, that if the tubs were a fair size you would earn more wages throughout the year?—Yes.

1502. Mr. *Bruce.*] You have worked under the weighing system as well as the measuring system?—Yes.

1503. Did they allow you, in that country, to weigh brassis and shale, and so on?—Yes, except white-bands; all brassis is weighed in the county of Durham.

1504. Mr. *Bromley.*] You have said that the enforcement of the rights of the colliers as to the inspection of these tubs, is optional?—I understand that it is so now, under the present Statute.

1505. With whom is it optional; on the part of the masters, or on the part of the men, or both?—It is optional in the Statute, I understand.

1506. And you would wish for something which would be compulsory?—Yes.

1507. Mr. *Woods.*] You said, just now, that you want an enactment as to weighing?—Yes.

1508. What provisions do you wish it to contain?—We wish the coal to be weighed by the imperial standard weights, and for those weights to be under the inspection of the inspector of weights and measures of the district.

1509. Do you wish to have it made compulsory on the owners of mines that the men should have a representative on the pit's brow to see the weighing performed?—Yes; that is to say, where we require it; we believe that we should not require it in all cases; but where we found that an inconsistency was arising, we should want the power to appoint a man. We believe that some of the owners would appoint men that would do it right, and then we should not use the power against them, but we should use the power against them if we thought we required it.

1510. Will you tell the Committee what is practically the mode of engagement of a collier; is it not that he comes on the pit's brow, and asks if there are any vacant places, and then goes down into the mine with the underlooker, and tries awhile at the work?—No.

1511. Will you describe the mode of engagement?—When a collier wants to engage, he sees the underlooker, and asks him for work; of course it is for him to find the man work; you are then, in most cases, asked to go and sign your hand to a code of rules before you are allowed to go down at all; in fact, before you are engaged; then you fetch your gear and your tools, and take them to the pit, and the underlooker finds you a place, and you are under a contract then for 14 days' notice

1512. Is the rate of payment either of yards or for scorage frequently varied in your neighbourhood?—Yes.

1513. How often would you venture to say that variations take place?—I do not quite understand the question.

1514. If the mine became thinner, would the collier ask for more scorage?—It is very seldom it is taken that way; it is not often that any alteration takes place, except in times of depression, and then the men leave. If I was working at a place, and my place became inferior, I should not dally much with the underlooker. I should ask him for an increase of wages. The work varies a good deal; perhaps the work may be bad for a month, and then good for two or three months; and a man that does not like to travel through the country and knock about up and down, puts up with some difficulties.

1515. Would you think that wages were varied oftener than once a year, as a rule?—I do not think they vary so often. The general cry with the underlookers or the managers, when you ask for anything of that sort, is that they cannot give it,

it, because they cannot go into the markets with other people if they give it.

1516. Supposing that in the same mine, one end of the working, the north end say, was very much thicker than the other end, which might be a mile off, I suppose, in the same pit; that is to say, supposing the mine was much taller at one end than at the other, would the rate of scorage probably be different?—In some cases it would, in some cases not. I know cases where the coal is six feet in one part and three in another, and there is no variation in the price.

1517. Is there any other fact which causes that equality of payment with such an inequality of circumstances?—Very likely the coal is stronger where the workings are thicker.

1518. By "stronger" you mean harder?—Yes; and generally, when you come down to those workings, they are in what we call a syke, and the coal is worse to be conveyed from there.

1519. You would say, therefore, that wherever that great difference does occur, there are other corresponding differences which tend to equalise things?—Yes, certainly.

1520. As to these tubs which have been spoken of, and their variation in size, I presume that they are all supposed to be of uniform size in one mine and in one pit belonging to one employer?—They are supposed to be.

1521. There would be a great many, I suppose, in that pit, where you describe there being 120 men and 60 or 80 boys; how many tubs would you suppose there must be in your pit to each man?—I cannot exactly say; five or six perhaps, it might be more.

1522. Then there would be 600 tubs for 120 men?—I should think there would be.

1523. These tubs are waggons, are they not?—Of the shape of waggons.

1524. Little waggons with four wheels and two axletrees; in fact regularly constructed little waggons?—Yes.

1525. Do they last long; are they made strong?—They will last long if there is no accident or break down.

1526. Six hundred tubs would cost a good deal of money, would they not?—Yes.

1527. What length of time do you think it would take to make 600 tubs, new, for the purpose of increasing their size?—It would take a long time; it just depends upon the number of hands; of course it would be expensive.

1528. The Chairman asked you a question, I think, as to the management of the ventilation; is it true that the ventilation is maintained night and day, by constant relays of firemen; is there always somebody down night and day?—In the large extensive pits there is, but not generally in the other pits.

1529. In your pit, for instance, where there are 120 men, is there always somebody down for that purpose?—Yes; there are men in that pit regularly.

1530. And where there is a furnace, are these men always down, even on Sundays?—Yes.

1531. Do you agree with the witness who was examined at the last sitting of the Committee, and who said that when there is a re-arrangement of the wages, the question of the size of the tubs is mooted amongst the men?—Yes.

1532. There is another point about wages, on which much has not been said, but which, however, has been named, and that is yardage; there are two systems, I believe, of working the mines in your country so far as relates to wages, not to speak of more than two; one system being payment by the score of waggons, and the other by the lineal measure of the drift in which you are working. Now the rate of pay for the yard is a matter of much more frequent variation, I believe, than the rate of pay for scorage?—Yes.

1533. That occurs very frequently, does it not?—Yes, in some collieries, very frequently.

1534. And in the lineal measurement by yards, the rate of pay per yard varies according as it is for hard coal or thin coal, or working down brow, or in wet places, or in proximity to a fault; all those things are causes of variation in the rate of pay, are they not?—Of course, if there are wet places, or if there is a fault near those things make it vary; that is optional betwixt the men and the masters.

1535. That is a very frequent arrangement, is it not?—Yes.

1536. Mr. *Ferrand.*] Are the weights that are used in the collieries inspected regularly by the inspector of weights and measures?—They are never inspected, because they do not come under the inspector's jurisdiction. At a colliery where I was once working we made a strike, and took the weight to the city of Durham to the inspector, a distance of eight miles from where we were working, and then he would not inspect it because it was not an imperial weight. That causes me to know that they never are inspected.

1537. Are the colliers anxious that the weights should be inspected?—They are.

1538. The colliers wish to have the weights regularly inspected by the public officer?—Yes.

1539. And you think that if that were done it would put a stop to much dissatisfaction?—Yes, it would be a check.

1540. Do not you think that the tub or measure could also have some board upon it, or mark specifying its exact size, and that that could also be inspected by the inspector of weights and measures?—Yes, it might.

1541. Do all these tubs come to the surface?—Yes, anywhere where I have worked they have done so.

1542. And therefore there would be no difficulty in that plan which I suggest?—No.

1543. I wish to ask you whether you find any difficulty in arranging matters in a friendly manner with the proprietors of collieries?—Yes, we find difficulties in that respect.

1544. Do you often try or show a friendly anxiety to settle your differences with the proprietors, when you think that you have reason of complaint?—Yes.

1545. You do that constantly, do you?—Yes, when we find that things are going against us. Of course in some cases we can do it better than in others. Where I am working at the present time, for instance, I am not in the least afraid to go to my master, and tell him what I think he is doing, but you could not approach all gentlemen in that way.

1546. At the present time the colliers in your colliery are on friendly terms with the proprietor?—Yes.

1547. And do you find him ready to discuss matters with you in a friendly spirit?—Yes, he is ready to discuss, but as I have told you he has enlarged the tubs in 18 months from six cwt. to seven cwt., and he now says that it was an arrangement that they should be seven; we do not agree to that.

1548. Do you find that, generally speaking, there is not that friendly spirit between the colliers

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liers and the proprietors, that you would wish to see?—There are not many collieries where the proprietors take an interest in the men; they leave subordinate officers to do the work.

1549. Do I rightly understand you to say that they do not themselves look after the collieries, but leave it to the agents to do that?—Yes, as far as the wages of the men are concerned.

1550. In that case do the colliers communicate with the proprietors?—Very seldom.

1551. But would it not be better for the colliers to communicate with the real owners of the collieries, instead of communicating with the agents, if they found they did not get redress?—It would not be very pleasant for the colliers to do so; at least we think not.

1552. *Chairman.*] The colliers may appoint a man to look to the measuring or weighing, as it may be, on their behalf?—Yes.

1553. How is he appointed; do you have a meeting?—Yes, the men have a meeting, and fix upon a man that they think fit for the work.

1554. Are there any men that have the power of calling a meeting for that purpose?—No.

1555. How is it understood that there will be such a meeting?—We meet frequently, and anything that wants arrangement is discussed in those meetings.

1556. The man that you appoint must be one of the men that are employed in the colliery, must he not?—Yes.

1557. Is that objected to by the colliers?—We think that it would be better to pick any man, never mind whether he is a collier or not.

1558. You object to that restriction which obliges you to appoint a workman?—Yes.

1559. Because if the man must be a workman in that colliery, the owner or overlooker has the power to dismiss him; is that what you think?—Yes, and again I am sorry to say there are collieries where they could not find a man sufficiently up to the work.

1560. Have you anything that you wish to say about trucking?—No.

1561. Have you anything which you wish to say about coroners' inquests?—Yes.

1562. What have you to say as to coroners' inquests?—I think that the jury ought to be composed, at least one-half of them, of practical miners.

1563. Is there a feeling of injustice among the men as to the way in which inquests are conducted?—Yes.

1564. Have you known of many coroners' inquests upon accidents?—Yes.

1565. And is it your opinion, that the jury have sometimes not given a fair verdict?—It is; we have instances before us.

1566. And that is the general opinion of the men, is it?—Yes.

1567. Mr. *Foster.*] Would you wish that the remainder of the jury should consist of owners of mines?—We do not care who they are.

1568. Have you any reason from your own knowledge to complain of the decision of any jury as being contrary to the evidence that was given?—Yes; I do not believe in the case of the explosion at High Brook Colliery that the verdict was given according to the evidence there; I might be wrong, but I believe not.

1569. Is that the general opinion among the colliers?—Yes.

1570. Is that the general opinion entertained by independent parties in the neighbourhood?—It is the general opinion not only of colliers, but of all other classes of people that I have conversed with; I do not see how a shoemaker, a farmer, a tailor, or a grocer can have any knowledge of the pit workings.

1571. The Inspector of Mines for the district, is generally present to attend the inquest, is he not?—Yes.

1572. And he watches pretty closely, does he not, to see that there has been no infringement of the Act?—As far as his watching is concerned, I know nothing about it; the man will do his duty, it is likely enough.

1573. Mr. *Bromley.*] You would, as I understand, suggest making the Act of 1860 more compulsorily than it is, because you have now the permission to place a man at the pit, to see that the size of these tubs remains the same. How would you propose to make it more compulsorily?—I do not consider that we have an Act that gives us the power, because if the owners can put the men off the pit-top after they are appointed, we have no advantage.

1574. I will read you a part of the clause to which I refer; "It shall be lawful for such persons" (that is to say, persons working at mines), "at their own cost, to station a person (being one of the persons for the time being employed in such coal mine, colliery, or ironstone mine) at the place appointed for such weighing, measuring, or gauging, in order to take an account thereof"?—I would propose that there should be a penalty provided.

1575. *Chairman.*] Something was said about the power of the men to apply to the owner of the mine; is there any feeling among the men that if they were to do so, they would offend the agent?—Yes.

1576. They do not like to do it in fact?—No.

1577. Have you known of men being dismissed, because they appealed to the owner against the agent?—Yes; I have been dismissed myself, sometime back, in that way.

1578. Did the agent dismiss you?—Not quite that; they have a very nice way of coming round a matter like that.

1579. You were not directly dismissed for that cause?—No.

1580. But you found that soon after you had applied to the owner you were sent off the mine; is that what you mean?—Yes; sometimes it will range over two or three months, from that to six months.

1581. It is scored against you, you mean?—Yes.

1582. Mr. *Bruce.*] How would you prevent that?—I cannot prevent it; the best way of doing it is to pass a Statute to make it easy for us to look after the thing.

1583. Mr. *Woods.*] Are you acquainted with these words, which occur in clause 23 of the Act of 23 & 24 Victoria; "Penalty for obstructing inspectors:" "Every person who wilfully obstructs any inspector in the execution of this Act, and every owner or agent of any coal mine, colliery, or ironstone mine, who refuses or neglects to produce as hereinbefore required, a map or plan of the workings of the mine to any inspector, or to furnish to such inspector the means necessary for making any entry, inspection, examination, or inquiry under this Act, or who neglects or wilfully violates any provision of this Act, for the neglect or violation of which no other penalty is hereby imposed, shall, for every such offence, be liable to a penalty not exceeding 10 *l.*?"—But I understand that only to refer to the obstruction of the inspectors.

Mr. WILLIAM PICKARD, called in; and Examined.

1584. *Chairman.*] WHAT are you?—I am the Miners' Agent of the Wigan District.

1585. You were a working miner, I believe? I was a working miner.

1586. For how many years?—For 16 years.

1587. And you are no longer a workman, I suppose?—I am no longer a workman.

1588. What does the Wigan district include?—About 12 or 14 miles in diameter.

1589. What do you mean when you say that you are agent?—I am employed by the men to see to their interest, and to give advice in difficulties arising betwixt employer and employed.

1590. Are you recognised in that character by the mine owners?—In some cases I am, and it has led to satisfactory results, both for the employer and employed.

1591. And in some cases you are not, I suppose?—That is so.

1592. May I ask in what way you were appointed to be agent?—I was appointed by a district; that is to say, by a part of the men of the district, at a fortnightly-gathering, where there were delegates representing thousands of men who were employed in the district.

1593. Your business, then, is to advise the men and to mediate between them and the employers, stating their case to their employers for them?—Yes.

1594. How many years have you acted in that capacity?—Since 1862.

1595. In that way your attention has been directed, I presume, to all the different subjects of complaint that the miners have?—Yes.

1596. Or to evils which may not be the subjects of complaint?—Yes.

1597. As to the subject of the employment of children, has your attention been directed to that?—It has.

1598. You are speaking, I presume, not merely of one particular mine, but of the mines included in the district for which you are employed as agent?—Yes.

1599. Is there a large proportion of children between 10 and 12 employed in that district?—There is.

1600. Have you noticed any improvement as to the employment of children since the passing of the Act of 1860?—Yes, there has been a little improvement, but not so much as might have been expected.

1601. Have you any means of telling what number of children there are, between 10 and 12, employed in that district?—I should say we have from 2,000 to 3,000 children between 10 and 12 years of age.

1602. Should you say that the conditions of the law as to the employment of children, and as to requiring certificates, are complied with?—No, as a rule they are put aside altogether.

1603. What evidence do the owners of mines or their agents generally require of the ages of children that are employed?—They simply ask the man, and he makes a statement; it is taken for granted, and the thing passes off.

1604. Do you think that the miner often overstates the age of his child in order to get him employment?—Yes, it is too often the case.

1605. What is the facility generally given in that district for the children obtaining instruction at school?—The facilities are pretty good on the whole, but the physical exertion of the mine debilitates their mental powers, and makes them unfit for instruction.

1606. Have you any suggestion to make upon that point?—I would suggest the propriety of detaining the boys up to 12 years of age, and that they should not be allowed in the mine at all under any circumstances before that age.

1607. You would not under any circumstances allow boys under 12 years of age to be employed in the pit?—No.

1608. Whether they could read or write, or not, you would not let them be employed?—No; and I think that they should not be allowed from 12 to 14 to work more than eight hours per day, and that for something like five days a week they should have two hours in the school.

1609. How do you think such a proposal would be taken by the working miners generally by which they would be prevented from employing their children between 10 and 12?—I think that if we had an Act of Parliament to enforce that, supposing the boys to be prohibited, the circumstances of the eight hours question would turn round and meet the circumstances of the colliers, and there would be little difficulty thrown in the way of carrying out the Act.

1610. Mr. *Bruce.*] That is, as between 12 and 14?—Yes.

1611. *Chairman.*] What would be the feeling of the working miners generally, if they were told that they were not to employ their children in the mine at all under 12; would they be for it or against it?—I believe the sensible part of the men would be for it, and strongly so, because they feel that they are so deficient in schooling themselves.

1612. Would the majority be for it?—Yes, the sensible part.

1613. Are the sensible part the majority?—I am thankful to say we are making progress.

1614. Would there be great difference of opinion about it?—There would be great difference of opinion, I admit.

1615. And a great many would think it a hardship to be debarred from using the labour of their children under 12?—Yes.

1616. Have you made any observations as to the effects of the present employment on the health of the children?—Yes.

1617. What observations have you made?—I find that the health of the boys so employed in the mines has suffered a great deal. What with the additional size of the tubs which has been spoken about, the labour has been so excessive that it forces many a boy into a decline. I have myself attended the death-beds of boys that have been brought into declines, and such like, through sickness, brought on, I believe, through being too early at the mines.

1618. What is the provision for medical attendance?—The greater number of the colliery proprietors compel the men to pay a doctor, but the attendance of medical men, as a general rule, is not so satisfactory as it might be.

1619. Do the doctors make visits to the mines?—No, not to the mines. They go to the collieries if there is an accident or an explosion, and if any men are brought up maimed (I must give them

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every praise in that respect), but they go to the dwellings, and the attendance in that respect is not what is desirable.

1620. It is left to the parents or friends of the boy, if the boy is sickening, to send to the doctor?—Yes.

1621. In the case of accident, of course a surgeon is sent for?—Yes.

1622. What is the appearance of the boys generally?—They carry a pale appearance, as a rule; not that lively vividness in the eye and the countenance which they ought to carry.

1623. I understood you to say that in some cases the men were required to subscribe to a fund for a doctor?—Yes.

1624. Does the doctor make visits in that case, or wait till he is sent for?—He waits till he is sent for, and then makes occasional visits.

1625. The doctor does not come to the pit's mouth on certain days, so that those who wish to see him may see him?—No; he waits till he is sent for, or is waited upon by the patient himself.

1626. Would you think it a good thing in a large colliery if it were known that the doctor had certain fixed hours of attendance there?—I think it would do no harm; it would tend to their giving more advice.

1627. Mr. *Bruce.*] The Act of 1860 requires the owner to keep a certificate of the attendance of every child between 10 and 12 that ought to be at school?—Yes.

1628. And it imposes a penalty upon him if he does not do so?—Yes.

1629. Have you ever been employed to enforce that penalty?—I have not.

1630. If the men are so anxious, as I fully believe they are, for the improvement of their children, how is it that they have not directed their attention to that most important point?—Because of the strong intimidation that is put on the men to prevent them from giving me information about the matter.

1631. A man, we will suppose, gives you information that a boy employed in a certain colliery has no certificate, and you summon the employer before the magistrate, who is to know who gave you that information?—I have not had a case of that sort before me.

1632. Is not that a proof that the men are very listless and uninterested on that question?—There are too many that way, I am sorry to say.

1633. I understood you to say that you would so far follow the precedent of the Factory Acts as to oblige every boy employed in a colliery between the ages of 12 and 14 to attend some school?—Yes.

1634. Would you call for the interference of Parliament as to the manner in which the boy should spend his time before 12 years of age?—I think that if anything effectual is to be done in the education of the colliers' children, it will have to be made compulsory by Act of Parliament.

1635. What sort of compulsory legislation should you recommend with respect to the education of these children of miners?—That they should be forced to seek a certificate before they should be admitted into the mine.

1636. Would you lay that obligation upon the colliers only of all the workpeople of Great Britain?—I came to speak for the colliers. I should wish that to be the rule for the colliers, at least.

1637. Then, in fact, it comes to this, does it not, that you are in favour of a compulsory system of legislation, with respect to education, all through England?—For the colliery boys, I would suggest it.

1638. Why should you distinguish them from other boys?—Because I think they are an exception to the rule.

1639. In what respect?—In a physical respect.

1640. Why should education be more valuable to them than to other classes of boys?—I do not know that it is more valuable; but, through the over exertion in the mines, there is less chance for the boys that are employed there to get education either at Sunday schools, or at day schools.

1641. You would prevent the employment of a boy underground till he was 12 years old?—Yes.

1642. And you would insist upon his being educated by compulsory means before he was 12?—Yes.

1643. Do you think that it would be possible to maintain a distinction between colliery boys and other boys in that respect?—Perhaps it might be difficult.

1644. It is impossible to look at a question of this sort absolutely by itself, is it not?—There is some difficulty, I am aware, in legislative enactments, to meet the points.

1645. Is there a larger provision of schools in that district now than when you first knew it?—Yes, the volunteer principle in the town has brought us great facilities, greater than what we had before by a great deal.

1646. Is there a sufficiency of schools?—No, I would not say there is a sufficiency, because in some places, especially in the outskirt districts, they are very deficient indeed.

1647. If the State were to require that every child should be sent to school, would there be schools for the children to go to?—No, but I think if the circumstances were to spring up the schools would be forthcoming.

1648. Mr. *Fawcett.*] You say as I understand you, that the Act which was passed in 1860, for preventing children under a certain age being employed in a mine, and requiring a certificate that they should be able to read and write, has been very generally evaded?—Yes.

1649. And that if it had not been evaded a great improvement would have been produced?—There would.

1650. Then supposing that Parliament should pass the Act which you recommend, what security can you suggest to prevent that Act being evaded in the same way as the existing Act, because if all Acts are evaded, what is the use of passing more?—I think if it were made a condition that certificates should be really enforced, the men take so much more interest in their children's welfare now, that they would seek to secure the application of that.

1651. You say that the men take more interest in the subject; if that is the case why do not they now enforce the protection of certificates, why should they do so more if a new Act was passed than they do at the present time?—I am sorry to say that the men have been neglectful in that matter in seeking its enforcement, but I can say this, that since it has come to the knowledge of the proprietors that the men were moving about these things, they have exercised stronger regulations with the subordinate officers for the protection of the children.

1652. Then

1652. Then according to your evidence the existing Act is less and less evaded each year in consequence of the men taking a greater interest in the subject?—Where they do take more interest that is the case.

1653. Then gradually you think the Act will cease to be evaded at all, do not you?—In lapse of time, but we hope to have it improved.

1654. If your suggestion were carried out, that no child under 12 should be employed, do not you think that if those children could be freely employed in other branches of industry they would be employed in those other branches of industry?—Yes.

1655. Then in that view the Act might become a dead letter?—They would do that for a time, they would not come into the mine until they were 12 years old.

1656. I suppose the reason why you wish to place the limit higher in the case of coal mines than in the case of factories is, that owing to the peculiar nature of the work in mines, there is much more difficulty in enforcing half time?—Yes, owing to the larger measurement and the increased difficulty of working (though the proprietor has a right to get as much profit as is possible) the work of the boys is increased now, compared with what it was.

1657. I suppose if it were possible to carry the same principle into effect in coal mines as is adopted in factories, you would be satisfied with similar provisions to those that exist with regard to factories?—Yes.

1658. Mr. *Foster.*] Has the improved system of working which you spoke of driven more work upon the boys than they formerly had?—It requires more physical labour; if a mishap takes place with a tub which was formerly 4 cwt. or 5 cwt., but is now 7 cwt. or 8 cwt., if it gets off the rail, for instance, a boy has great difficulty in getting it on again.

1659. Is not the age of the boy proportioned to the work; would not a larger tub necessitate a larger boy being employed?—Yes, but in some cases we have two boys to a large tub instead of one.

1660. Therefore it does not follow because the system of getting coals is different, that the labour of the boys is taxed to a larger extent?—It follows upon their tender years because of the enlargement of the measurement and because of the ups and downs of the mines, where the strata are not regular, which is much the case in Lancashire.

1661. At what age did you begin to work yourself in mines?—I was about 16 or 18.

1662. You did not begin very young?—No.

1663. Do you think that boys are worked harder in mines now than they were at the period at which you commenced work?—Yes, I do.

1664. I think you stated that the condition of these boys, since the Act of 1860, had rather improved than otherwise?—Yes, a little.

1665. Although the Act has not had its fullest chance?—In that answer I was speaking exclusively upon education. In the reading and writing there is an improvement with the boys. I do not mean in physical development.

1666. Do you think that it would be desirable still further to increase the tendency of this legislation with respect to education before the full benefit of the late Act has been realised?—Yes.

1667. You really think, as I understand you, that the boys now work harder than they did?—Yes.

1668. You say that the present Act is evaded; of course a more stringent Act might be equally evaded?—Yes.

1669. Would it not therefore, in your opinion, be desirable to realize the full benefit of the present Act before applying for a more stringent one?—I think that there would not be such a strong disposition on the part of the men to employ their children in the mines, if that alteration were made from 10 to 12 years, and they would be better able to carry out the education of their children by that means.

1670. Do you think that a boy would be better calculated to get a good physical development, if his entrance into the mine were delayed to the age of 14?—I would say 12 years of age.

1671. The labour of these boys, when first they go down the mines, is not of a severe character, is it?—It divides itself into two kinds; the labour of those employed by the masters as door-tenders or pony-drivers, is not so great as the labour of the rest.

1672. Those boys are not so fatigued, are they, but what they will run about and play when they come up?—You will find a few like that, but I can find scores of boys who lie on the floor with the dirt about them because they are so physically debilitated that they have not strength (and the mothers are complaining daily of it) to wash themselves so as to get to bed.

1673. And still those mothers who complain of this continue to send the boys to this kind of work?—Yes.

1674. They complain of the fatigue of their children, and yet continue to send them to this kind of work which induces the prostration?—Yes.

1675. There is something inconsistent in that, is there not?—Circumstances somewhat compel a great deal of it.

1676. Mr. *Woods.*] As to schools, you have already stated the extent of your district, but can you tell the Committee how many national schools maintained under the system of the Privy Council Department there are in your district?—I cannot exactly say.

1677. Do you think there are 11 in the town of Wigan?—Perhaps there may be.

1678. Do you know any considerable village in that district that you have described that has not a school?—A few have. There is Skelmersdale, and there is West Tawton, and there is Dalmy Tinsley, near to Manchester.

1679. Do you think there are 50 in your district, exclusive of those in Wigan?—I am not prepared to say.

1680. Are there 30, do you think?—Perhaps so.

1681. Is it within your knowledge that the colliery owners of Wigan in the year 1861 established a mining school under the Government Department of Science?—Yes, the New Wigan Mechanics' Institute.

1682. Do you know that the master of that school has got a science certificate?—Yes.

1683. The title of the school is, "The Mining Mechanical School," is it not?—Yes.

1684. Are you aware that working miners and boys can attend at night there at the nominal payment of 3 *d.* to 6 *d.* a week?—I am.

1685. Do you know that it has been maintained since 1861, and that it is now in operation?—Yes.

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1686. And that it is almost impossible to induce the miners or their children to attend, although the master has let it be generally known that attendance at the school and obtaining a certificate would be followed by promotion?—Yes, I am aware of that.

1687. Mr. *Ferrand.*] You say that you are an agent for a district about 12 miles in extent?—Yes.

1688. Do you know any other agents in Lancashire?—Yes.

1689. Do you meet those agents for the purpose of discussing matters connected with the collieries?—Yes.

1690. How often in a year?—Perhaps half a dozen times.

1691. Do the colliery men meet you also, or do you meet as a body of agents?—The colliery men meet and authorize us to do certain work.

1692. To discuss all matters connected with their trade?—Yes.

1693. At these meetings do you as agents generally advise conciliation and friendly feeling?—We do as a rule.

1694. And do you recommend that disputes that occur shall be settled by private and friendly arrangement, if possible, between the employers and the employed?—Yes, I have always acted upon that policy, and have given advice with that bearing.

1695. You were present, I believe, during the examination of the last witness; do you, as agents, communicate with the proprietors of the collieries if you find that there are unpleasant disputes between the men and the proprietors, such as the last witness alluded to?—Yes.

1696. And do you find the proprietors of the collieries disinclined to make inquiries and determined to leave everything in the hands of their agents?—Yes, I have been objected to as an agent to settle disputes on behalf of the men by some masters and not by others.

1697. Is that from a feeling on the part of the proprietors that you as an agent should not interfere in the disputes between masters and men?—Yes, there has been that feeling; it is not that they have anything against my personal or private character, I believe; I have been told by proprietors that they have nothing against me personally, but that they could not receive me on behalf of the men.

1698. Do you think it unreasonable on the part of the proprietors to object to an agent, in your position, interfering?—We do think it unreasonable; the men feel it very strongly.

1699. The men do, not yourself; is that what you mean?—I have no personal feeling about it; if the master receives me, I wish to do the best for him and for the men; that is the course I pursue.

1700. On an average, what are the wages of these boys that are under 12 years of age?—They will average from 1*s.* to 1*s.* 3*d.* and 1*s.* 6*d.* perhaps.

1701. Not more?—Not more.

1702. Then, if a collier had two boys working in a pit, and they were taken away and compelled to attend school, he would lose about 3*s.* a week, on an average?—I think it might be so regulated that they would not lose.

1703. Will you say how that might be managed?—By the eight hour system, the boys, not being in the mine later than two o'clock, might attend the school in the afternoon.

1704. But you are against boys being employed under 12 years of age, are you not?—Yes.

1705. But the colliers as a body are not?—No.

1706. And they will not send them to school, we hear, although there are schools in the neighbourhood, and inducements held out for them to do so?—Yes, but that arises from the boys being over-worked; so much physical exertion is put upon them that it takes away their energy.

1707. Do you believe that if no boys were allowed to work in a colliery under 12 years of age the parents would send them to school, and compel them to attend it?—Many of the respectable portion of the parents would do so, but I am afraid that unless Government interfered and forced the parents to do so, some would not do it.

1708. Would you approve of an Act of Parliament which enforced the non-employment of boys under 12 years of age, and which provided that when they came to the colliery for work at 12 years of age, they should produce a school certificate, showing that they had attended school for the previous three years?—Yes, I think that might be done; and I would remark, that it might be done with great advantage, especially to the mining department.

1709. And after 12 years of age they should be compelled to attend school for a certain number of hours during the day, according to your view?—Yes.

1710. *Chairman.*] With reference to a question which a Member of the Committee asked you just now, what would be the promotion that the boys would get by obtaining a certificate through going to this mining school which you have mentioned?—Their promotion would be, that they might be open in the market to be employed by a sensible and judicious underlooker; but we have not so many of those as we should have in the subordinate officers. A spirit of favouritism and submission to any menial services they may be put to leads them not to get the right men.

1711. To what do you attribute the non-attendance of the boys at that school to which you have referred?—I attribute it to this: in the first place, the school is set apart, in great measure, for the higher orders of society, and the colliers could not, from the very nature of their position, class themselves with them. I may say also that there have been expressions which have been communicated to me as having been used by parties that attended this scientific school, which reflected rather more upon the collier than he would like to bear.

1712. That would drive the ordinary collier, you think, from sending his boy there?—Yes, it stands more in the position of a first or second class institution than of one coming down to the wants of the men.

1713. The boys from that school would at once become underlookers or overlookers?—Yes.

1714. And you consider that more a school for the children of the underlookers, than for the children of ordinary men?—Yes. I am glad to see that, in some cases, the proprietors require a compulsory attendance, on the part of their subordinate officers, at the school which has been established where Mr. Burtonhead is the certified teacher.

1715. What is the general feeling in the district for which you are agent, as to the employment of women?—The feeling is, that it is degrading; and we wish, as miners, to have more respect

respect to the fair sex than to see them placed on the pit bank.

1716. Should you say that the general feeling was against the employment of women altogether in connection with the colliery works?—Yes; many of the girls have expressed themselves to me in earnest terms that they should be most happy when such a law was passed.

1717. Some part of that work is hard work, is it not?—Very hard. Some of those girls have raised as much as 10 tons of stuff a day to go upon the railway, by shovel or spade.

1718. Their work consists in picking and wheeling, does it not?—Yes.

1719. Is there any difference in the size of the barrows used by men and the barrows used by women?—No, there is not much difference; there are a few barrows made use of about the pit by women, but it is not often that the women have to wheel the barrows; the men do that, as a rule.

1720. There is no special smaller-sized barrow for the women?—No.

1721. Are women employed to put the coal on to the ship or railroad?—Yes; lifting the waggons up and tilting them down to the boats or railway waggon.

1722. Does that require considerable muscular exertion?—Yes, more than a female should do.

1723. Should you say that it was a man's work or a woman's work, looking, I mean, to the strength required?—A man's, decidedly.

1724. Then both in your own opinion and as representing the opinion of the district, you are against the employment of women?—Yes.

1725. Supposing any law were to be made to put an end to it, should you wish it to be a law to take effect at once?—No, we should wish to give time for it; in 1842, when the law was passed to prevent women going down the mine, I know that in the mine where I worked, and my mistress with me, it had a very painful effect coming on so suddenly; we should wish to let them have two years for it to take effect.

1726. The effect of the total stoppage of the work was to drive the women to evil courses, I suppose, in 1842?—Yes, I am sorry to say it was.

1727. The employment of women in collieries in the last three or four years has increased, has it it not?—Yes, it has.

1728. Was not that in consequence of the cotton famine?—Yes, it was in part; and I look upon it as a happy circumstance in some respects.

1729. Now the women there are all going back to the factories, are they not?—There are many that are gone back, but still we have a great many left.

1730. Can you give us any idea of the number of women and girls in your district employed about the mines?—I have tried to get at it, and I should say from 400 to 500 in my district.

1731. When you say that your district is 12 miles in extent, you mean 12 miles square?—Yes.

1732. Mr. *Bruce.*] Do you think that the women employed about the collieries are less moral than the women employed in the factories?—I should say that they are a little worse; I mean to say that the per-centage of bad ones in proportion to the number may be a little more than what the average would be with the girls in the factories.

1733. But you are not quite satisfied with the state of morality in the factories?—No.

1734. Would you prohibit the employment of women in the factories also?—No, I would not.

1735. Why not?—I think it a more honourable occupation for them in the mills.

1736. Still it is injurious to their morality, you think?—Not so much as working on the pit bank; but it is more on the social position that I take it; I do not take it on its moral ground alone. The degradation, in its social bearing on the girls, is deplorable in the extreme. When these 400 or 500 girls become colliers' wives, the men suffer greatly from this degradation, and it causes them to leave their homes, and drink.

1737. You would be obliged to stop the employment of women in the ironworks as well, would you not, if you stopped it in the collieries?—I cannot speak for any other trade.

1738. You live in a country of ironworks, do not you?—No.

1739. Have you ever been in an ironworks district?—I have been in North and South Staffordshire, but I do not know its bearings on the question of female employment.

1740. Can you see any difference in the circumstances of women employed in ironworks and the circumstances of women employed above ground in collieries?—I have not ascertained anything as to that.

1741. Can you see anything that makes a distinction between one class and the other?—I have not ascertained that, but I know, from house to house visitation, that it is a deplorable state of things in our district, looking at its social bearing.

1742. But the employment of women in factories was found equally deplorable in its social bearing upon the women so employed, was it not?—I cannot speak upon that.

1743. Is it not a notorious fact that the famine did great good in that respect by obliging the women who formerly worked away from home to stay at home with their children?—Yes, there has good come out of it, I admit.

1744. Now they are relapsing into their former state, I suppose?—Yes, I am sorry to say that there is a great deal which is not satisfactory in their position.

1745. Do not you think that the prohibition of the employment of the vast number of women now employed in collieries and ironworks, and in other employments which are obviously unfitted for women, would be attended with a great deal of grievous suffering?—I think not, giving the thing time to die out.

1746. How could they get employment elsewhere?—The girls with us can get employment in the mills; the competition is high in our district for mill hands.

1747. They can go there now, I suppose?—Yes.

1748. Without an Act of Parliament?—Yes.

1749. Then why do you wish for an Act of Parliament?—If in 1842, when there was an Act passed, we thought it degrading for them to go down, so now we think it degrading for them to be on the surface.

1750. Would you interfere in every case with the employment of women where that employment was degrading?—It would become injurious, I think, in this way: the best feelings of Englishmen have been gained from the instruction of a mother, and if a mother has not the means of teaching her children, she cannot make them take the road to greatness.

1751. That equally applies to agricultural em-

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ployments, does it not?—Yes, but that is only for two seasons, and we have work all the four seasons.

1752. Still, the employment out of doors is degrading to the women, is it not?—Not so much as on the pit bank.

1753. You have not enquired into that subject, perhaps?—I have taken note of it as I have gone along, and certainly I have seen nothing parallel to the effects of the employment of women on the pit bank.

1754. Mr. *Bromley.*] Do you think that the numbers at present employed at the pits could be furnished with employment in factories?—Yes, and in service.

1755. But you consider that the total cessation of their work at once would be accompanied with very great distress?—It would for a time; I should not like, as was done in 1842, to force them at a minute's warning to give up the present system.

1756. You have no suggestion to make, as I understand you, as to the mode of gradually diminishing their labour in the pit?—As regards diminishing the labour, that would be a different matter; they occupy a certain place, and the work is obliged to be done, otherwise they must knock the thing up altogether; they might do a certain number of yards a day, and have a fresh one put to assist them.

1757. Practically you would not suggest any mode of diminishing the labour?—I would suggest that the law should come into full force two years from this time; that it should not allow any more women to be employed, and that it should let those at present employed die out; if they had not died out within two years the law should not allow it any more after that.

1758. Mr. *Foster.*] You have spoken of the women getting employment in the factories; are you aware that there are very large coal and iron districts where there are no factories at all?—Yes, I believe there are.

1759. You are also perhaps aware, as you have been in Staffordshire, North and South, that the mining population are employed in districts very remote from an agricultural district?—Yes.

1760. Are you aware that if what you propose were done, there would be a vast number of females now employed in and about collieries in such districts thrown out of employment, and utterly unable to get employment of any other description whatever?—I am not aware that they would be prohibited from turning their attention to some other employment; by applying their minds to it, they would find another direction for their labour.

1761. Are you not aware that the nature of the districts to which I refer would prohibit them from getting such employment?—I am not aware of that.

1762. You must know the nature of a purely mining district?—Yes.

1763. And you must know that the widows of miners and other women in the exclusively mining districts have no other means of getting employment but in and about the mines of their district?—I am not prepared to speak particularly about North and South Staffordshire as to the numbers employed there; perhaps there might be difficulties in it, but there is service, and there are other employments that females are honourably employed in, and I think that they might turn to those sources for subsistence.

1764. Do you suppose that a widow of a collier would be able to get employment in domestic service?—Perhaps not.

1765. You would then debar her, would you, from earning a living in the way in which she felt disposed herself to do so?—I would certainly debar her; but I think it would be a very exceptional case where a widow with a family would be on the pit bank.

1766. Are you not aware that a great number of widows of colliers are employed in exclusively mining districts, and earn a very satisfactory weekly wage in that way?—I am not aware of that; as far as we are concerned, we have a few that do so.

1767. Are you aware that those widows would have no other resource but the union in the event of such employment not being afforded to them?—Yes, I am aware that many would be put to stress.

1768. Therefore what you now come forward to recommend the Legislature to adopt would be the means of driving a very considerable number of females, now earning a livelihood, into the parish union, or upon the rates?—It might drive a few there; but I think that the activity of the mind would lead to some other means of getting a subsistence.

1769. But these people, you are aware, do not live by activity of the mind, but by activity of the hand?—But necessity is the mother of invention.

1770. Do you think that the moral status of the women employed in and about the collieries is really of a lower order than that of women employed in the fields upon agriculture?—I believe it will stand worse if it is properly looked into.

1771. You have no real knowledge of yourself that it is so, have you?—Yes.

1772. Mr. *Woods.*] When you say that you have real knowledge that it is worse, have you any experience, apart from your own immediate district of the country, of the moral condition of women who work with men?—I have not.

1773. Will you tell the Committee what it is in this labour that degrades the women?—If they are employed from six o'clock in the morning to five or six at night, their absence from home leaves domestic duties entirely in a jumblement; and when the husband comes home it leads to much unpleasantness and much altercation, and leads the men to go and spend their time elsewhere.

1774. That applies, I suppose, to every employment of women?—Yes, I am speaking with more particular application to the girls on the bank. Of course it does apply in other cases.

1775. I ask you what you believe to be the degradation of these women, and you answer by telling me the inconvenience caused by their labour; other witnesses have stated to the Committee what they consider the cause of degradation to be; will you tell me your idea of what is the cause of the degradation?—That degradation arises from their employment not allowing them to get the domestic qualifications for filling their sphere of life as satisfactorily as they ought; and when these girls get married it leads to disappointments, and consequently unpleasant separations, and all the rest of it follows in its course. It does not allow the girls to compete in the market, so to speak, with the generality of girls.

1777. But

1776. But if these women are prohibited from working in the collieries how are they to be maintained?—There is other honourable employment, as I said before; they can go into the mills or go into service.

1777. I presume that that answer applies to those parts of the country where there is other employment to be obtained?—Yes.

1778. Mr. *Greenall.*] You object to the employment of women because you think it unfits them for family duties?—I do.

1779. What is the age of the women employed?—I was very lately at the inquest of one 12 years of age, in company with a Government Inspector.

1780. Was she employed on the brow?—She was employed on the pit-bank. As I was coming up to give evidence here, I met the inspector, and he asked me if I was going down to the inquest. I said "No, I am going to meet the Committee." He said, "Another girl has been killed."

1781. *Chairman.*] Do you refer to Helen Hanson?—No, I refer to another. The inspector told me, as I say, that another girl had got killed, and he said he was going to the inquest; and he took a cab and went. They are employed from 12 up to 50 or 60 years of age.

1782. Mr. *Greenall.*] A leading objection, in your mind, as I understand, would be, that a young person taking to that occupation would not have the means of fitting herself for family duties?—Yes.

1783. Would not employment in a factory have the same effect?—When she returns from the mills her physical debility is not so great as when she returns from the pit bank.

1784. Then you think that employment in a factory would be a degree better?—Yes, it is more congenial to her constitution.

1785. And your idea is, that after two years from this time that employment of women in collieries should cease?—Yes.

1786. Would you extend that legislation to women working in the fields?—No, I think that that work is not so degrading. You only have the field work for two seasons, but in Lancashire we have the girls at the pit sometimes night and day, and for all the four seasons.

1787. Mr. *Ferrand.*] You are acquainted with the difference between colliery work and factory work?—I am, to a considerable extent.

1788. Do you consider the factory work lighter than colliery work?—I do.

1789. The women in factories work under cover?—Yes.

1790. In collieries they work out of doors?—Yes, and they are sometimes wet to the skin.

1791. In manufactories they have seats attached to the power-looms, I believe?—I am not aware of that.

1792. They have not in your neighbourhood, then?—No, it is principally the cotton department.

1793. Is not the colliery work of a woman what really ought to be the work of a man?—Yes.

1794. And what you would call a strong man?—Yes.

1795. If a woman is working at a colliery, and performing the part of a strong man, is not her constitution and strength very much weakened?—Yes.

1796. And her health injured?—Yes.

1797. You have been asked questions with reference to ironworks, do you know any ironworks?—I do not.

1798. Therefore you cannot give any opinion as to the working of women at ironworks?—No.

1799. Do you believe that a collier's wages, if he were a steady man, would be sufficient to keep his wife and daughter without their working at the pit?—Yes, with other employments that they might pursue, it would be sufficient, with right application.

1800. If they worked steadily and were sober men, you mean?—Yes.

1801. Is it not true that the wages of many of these women are drunk at the public-house or beershop by their husbands or fathers?—Yes, I can mention you a case in point. A man abused me one day because I was against the females being employed on the pit bank, and that man has repeatedly taken the wages that his daughter has got, and spent them at the public-house.

1802. And you know that that is often the case?—Very often the case.

1803. Is the Government Inspector of your neighbourhood opposed to women working at the collieries?—I believe he is not favourable to it, judging from his expressions at the inquests that I attend.

1804. Mr. *Bruce.*] Is that Mr. Higson?—Yes.

1805. Mr. *Ferrand.*] Do you think that the general opinion in the district, both among the public and the colliers, is against it?—It is.

1806. *Chairman.*] Do you agree with what the last witness said about the improvement that had taken place in the character of the women since they were prohibited from working underground?—There has been a little improvement, but their employment at the pit-bank still keeps them in a low state.

1807. You think that there is room for further improvement?—Yes.

1808. Your feeling upon the whole subject is, that the better class of colliers who wish to raise themselves and humanize themselves, instead of deriving help from the women, are pulled down by them?—Yes.

1809. If they had a more delicate class of women for wives it would improve the men and keep them from the public-houses, you think?—Yes.

1810. Mr. *Fawcett.*] Do you know the South Yorkshire collieries?—Yes.

1811. Is it the fact that women are never employed there?—Yes.

1812. Is the public opinion of Wigan against their being employed?—It is.

1813. And the public opinion of South Yorkshire too?—Yes.

1814. How is it that, without any law, but owing to public opinion in South Yorkshire, they are not employed, and at Wigan they are?—The disposition of some of the men to get more means at the expense of the women has led to it.

1815. You say that one great reason why women are not employed in the South Yorkshire collieries is that the feeling of the colliers themselves is against it in South Yorkshire?—Yes.

1816. According to that, one would suppose that they are not against it in Wigan, and consequently women are employed in Wigan owing to the men; it is the men's fault after all?—A great deal of it arises in this way: the coal proprietor appoints certain gentlemen to take the oversight of the workings, and it is their policy, in order to

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receive approbation, to place things on the most economical basis they can, and these girls are employed at from 1*s.* up to 1*s.* 6*d.* a day, where a man, at the rate of 2*s.* 6*d.* a day, would have to be employed.

1817. Suppose you were to get up a requisition in your district, asking Parliament to prohibit women from being employed, do you think that the majority of the colliers in the district would sign it?—Yes, I think they would.

1818. Then, if the feeling is so strong on the subject, why should they allow their wives and daughters to be employed now?—There are some of the women who are employed who are not immediately connected with the miners themselves.

1819. Have any of those men who have these strong feelings wives and daughters employed in the collieries?—Yes.

1820. Why, if their feelings are so strong, do they come and ask for an Act of Parliament to enable them to do what they can do already without it?—As long as the law permits the thing they will go on allowing it.

1821. Is not their conduct inconsistent?—To a certain extent it is censurable; but if inducements and facilities are held out by a subordinate officer at the colliery these girls naturally go and get work in that way.

Mr. Maurice Mullin, called in; and Examined.

Mr. *M. Mullin.*

1822. *Chairman.*] What are you?—I am employed by the men at present. I am considered as the man whose business it is to look after their interest on the pit bank. I have been a miner in my time.

1823. You were elected at a meeting, were you not?—Yes; I was elected by the men to see after their interests on the pit bank.

1824. What mine are you connected with?—The Ince Hall Coal and Cannel Company's mine.

1825. And you were employed in that mine?—Yes; nine months in that mine before I was chosen by the men to act for them.

1826. Sometimes there is a difference of opinion between you and the man who scores for the master, is there not?—Yes; very often.

1827. Will you describe to the Committee what takes place when one of these tubs comes up?—When a tub comes up that he considers is not fair measure, that is to say, a tub that does not meet his views, he says, "This is short; I must take it," and then the man must forfeit that tub.

1828. In what way does he test it?—He has nothing to test it with but the naked eye.

1829. What do you do when he forfeits the tub?—I remonstrate with him, and tell him the nature of the difficulties that the miner has to contend with in the roads where the roof is low, and there is not sufficient room to fill the tub above level full, so that when the tub comes to the surface it is not quite so full.

1830. When you use that argument with him, you admit that it is not really full?—Well, it is a little under measure; but, under ordinary circumstances, it cannot be helped.

1831. You admit, then, that it is short measure; how do you explain that fact?—If the tub is two feet eight in height, and the height of the road is not two feet eight, and in some places the tub gets wedged under the roof, I want to remonstrate, and show him that it is impossible that that tub can be full when it comes to the surface, when it has not proper room to travel in along the road.

1832. What does the other man say to that?—He says that his master tells him he has nothing to do with the circumstances underground, but if the tub is not full he must forfeit it.

1833. At what particular pit are you employed?—At what we call the Old Cannel Pit, under Ince Hall.

1834. How long have you been employed by the workmen in your present capacity?—I began on the 11th of November 1862, and I have been employed up to the present time.

1835. You do nothing else, I believe?—I do nothing else but walk about and watch the interest of the men, and go backward and forward over the place.

1836. Have you ever been found fault with by the master's agent for the part that you took?—I have not been found fault with, but when we were suffering injustice, before I was appointed, we had a meeting; I myself was one that suffered; I had had 17 tubs forfeited in one fortnight, and I had got nothing for them, and I did not really know what I had got.

1837. What do you call the man at the pit's mouth who acts for the owner?—He is what I term the head banksman.

1838. You do not find that the head banksman does object to things as being short of weight when they are not short?—He does not know whether they are short of weight or not.

1839. He calls you and says, "This is short weight," and your first point is to look at it, and see if it is short weight?—It does not meet his views if it is level full; the head banksmen want it level full.

1840. Is there any difference of opinion as to whether it is short or not between you and the head banksman?—Yes; there is a difference of opinion betwixt him and me, because I can prove it has been full when it left the man's place.

1841. But, looking at the tub as it is, do you find that there is a difference of opinion between you as to whether it is short or not?—There may be two inches difference, but still it was full when it left the man's place.

1842. My question is directed to this: do you find that he complains of the tub not being full when it is full?—Of course not, because I am there to watch him.

1843. The difference of opinion between you then is not on that point, but it is on the point whether the man can help it or not?—Yes.

1844. As I understand, you say that a tub is not full because some part of the load has been brushed off by the roof?—Yes.

1845. Do you say that from your own knowledge?—Yes; from my experience in the mine.

1846. You know by experience of the working where that tub has come from?—Yes.

1847. And you know that the road is so low that the coal is brushed off by the roof?—Yes, in isolated places, perhaps it may be for a dozen yards, or eight or five yards, but if it is only one yard, if it is low, that will take off the top of the coal.

1848. How

1848. How much is the coal usually filled above the level?—Three or four inches, according to the nature of the road; if the road allows them they put more.

1849. There is no fixed rule?—No; they fill them according as the nature of the roads allows them.

1850. The tub that would be filled coming from one man is therefore not filled when it comes from another?—It is full according to the nature of the road.

1851. There is a different rule for one road from that which applies to another?—One man will have his road taller and in a better condition than another man, and his tub therefore comes out better.

1852. Is the man who has an inferior road expected to send up his tub as full as the other man who has a good road?—Yes, he is.

1853. Therefore there are not different rules according to the different states of the road?—No, every man is expected to send up a proper measure, whatever the height of his road is.

1854. Could you inform us what is the proportion of loads that are disallowed, or that are forfeited?—I can state the number that have been forfeited since I entered upon my present position in 1862, up to last Saturday; 6,656 tubs have been forfeited from the miners who work in that mine.

1855. That is out of how many tubs that were sent up?—I cannot get to know how many tubs they sent up; I only know how many tubs they forfeited. I must not interfere in the other matter; I have not that privilege; they would send me about my business if I was to interfere in that.

1856. Does it often happen that you agree with the head banksman?—I cannot agree with him.

1857. You agree with him sometimes, I suppose?—No, because I see that the men are themselves regularly suffering at the hands of the banksman.

1858. Do you mean that you do not ever agree with a banksman that he has made a just forfeiture?—No, because I do not consider that he has a right to forfeit it at all. When the nature of the road does not allow a man to fill a tub, so that it shall come up more than level full on the surface, is it right that he should forfeit that tub entirely?

1859. That is another point; but you consider, do you, that it is your business to fight the battle of the workmen in respect to every tub?—I can prove that it is unjustly taken, but he will not let me prove it.

1860. But supposing that the workman has agreed to send up a tub properly full, do not you ever go into that question with the head banksman, to see whether the tub really is full?—I cannot agree with him under ordinary circumstances.

1861. Do you mean that of all those 6,000 and odd tubs which were forfeited there was not one that was properly forfeited?—There were a few, but they are only a few to the many taken wrongfully.

1862. Do you never admit that a tub has not come up so full as it ought to be?—According to the supplementary rules, I admit that if a tub has too much dirt in it, it deserves to be forfeited.

1863. These forfeitures you have mentioned include forfeitures for an admixture of dirt, do they not, as well as forfeitures on account of the tubs not being full?—Yes.

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1864. But as a general rule, you say that you disagree with the head banksman?—In nine out of ten cases.

1865. Do you think that you are put there to object to any tubs being forfeited?—If it is a just thing; if a tub comes up with so much dirt in it that I consider it detrimental to the master, I do not necessarily disagree as to that point.

1866. Have you any rule as to how much dirt is to be allowed in the tub?—It all lies at the option of the subordinate officer.

1867. The understanding is for it to come up quite clean, is it not?—Yes.

1868. Does the head banksman always forfeit a tub with a pound or two of dirt in it?—It just lies at his option.

1869. You have nothing to say against it when he does forfeit one in that way?—I can say nothing against it; I do remonstrate against it, but it is no use.

1870. You do not complain of the forfeitures for dirt, but of those for measure?—I complain of them both; I think that they are something like equal in that respect.

1871. Your idea is that the workman should be paid for the weight, whatever it is?—Yes.

1872. That if he only sends up three-quarters of a tub full he should be paid only for three-quarters of a tub full?—Yes.

1873. But if he only sends up three-quarters of a tub where he ought to send up a full tub, is not he causing a waste of labour, like an omnibus which is going with only one or two passengers?—Yes, but that is not the fault of the workman; it is the fault of the proprietor.

1874. Whose business is it to keep the roads of a proper height?—The underlooker is the officer, and he has men under him who should look after it; he should appoint men to see after the interests of the workmen, and see that the roads should be attended to.

1875. This shortness of measure arises chiefly, as I understand you, from the roads not being kept a proper height?—Yes.

1876. Or from the floor being kept too rough?—It is from the inferiority of the roads in some cases, and in other cases where the tubs get rough travelling they lose something.

1877. What remedy have you to suggest in reference to the measure?—I would suggest a remedy, according to the Act which was passed in 1860, to have Imperial scales and weights at every pit head, and I would see that the tubs were properly weighed.

1878. But the Act of 1860 does not oblige the owners to pay by weight; it only says, that when the men have weights and measures the men may employ a man to look after their interests; there is no compulsory direction in the Act about it?—My suggestion would be that it should be made compulsory.

1879. You would make it compulsory to have weights in every case?—Yes, at every pit head; I believe it would satisfy the men.

1880. Have you noticed any variation in the size of the tubs that come up?—Not where I am employed; I do not see them vary anything worth speaking of.

1881. Supposing that the tubs were only just filled up flush with the top, these difficulties would not arise, would they?—Perhaps a collier will

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send up what I call a regular good tub, level full; then that has to travel 400 or 500 yards from where the man gets it; his drawer brings it to a certain siding, and the pony or the galloway is hooked on to it; he takes it 200 or 300 yards more; then the engine takes it 1,400 yards, and when it has travelled all this number of yards, it sinks down, and therefore when it comes on the pit bank, it does not meet the approbation of the banksman, and so he takes it.

1882. Do the banksmen expect it when it comes up to the pit's bank to be above the level? —Yes, they look for it being level full, and if not it is forfeited.

1883. Is there any rule as to how much it should be above the level?—No, there is no rule; the rule is supposed to be that it must be full up, and free from dirt and slack, and so on; it does not say how much above the level it must be.

1884. You object to the measuring system, as I understand you, because it does not admit of the same definite test as weighing?—No, it does not; I can see from the feeling of the men that they all want to have compulsory weights on the pit head, and to have the quantity that they get weighed; that is the feeling in fact amongst all the men; they consider that as long as the masters sell them by weight, the men should get them by weight. At the colliery I work at I have seen three tubs of what we call king coal weigh 21 cwt., though they were called 18, and the men felt aggrieved at the masters getting 3 cwt. of coal for nothing.

1885. Mr. *Bruce.*] Does the landlord get paid by weight?—I cannot speak to how he is paid; I have not gone so far into the thing as to ascertain how he is paid; the colliery owner sells it by weight.

1886. What countryman are you?—I am an Irishman.

1887. Have you worked under ground?—Yes, I have worked 12 years under ground, and 12 months in a factory.

1888. Is there any difficulty in Lancashire about allowing the Irish to work under ground? —No, there is no difficulty; at least, I have never experienced any; I cannot speak for others.

1889. How long have you been employed at this work of watching the head banksmen?—From 1862 up to this present time; more than three years.

1890. Has anybody objected to your being so employed?—No; when first we took it into consideration we were suffering a great injustice, as we thought; they were then forfeiting at the rate of 99 tubs a day.

1891. Do you think that you have been of any service to those who employ you?—I think I have, because when I entered on, anybody, even the little girls and boys employed about the pit bank had liberty to take the tubs; there was nobody to say no; and now it is betwixt the banksman and me entirely, and it is not left to people that do not understand the nature of the thing, and have no knowledge about it.

1892. You have sometimes reported to the workmen, as I understand you, that these deductions were unjustly made from their wages?— Yes, under ordinary circumstances; that is to say, when the nature of the road did not allow them to fill the tubs more.

1893. Have you thereupon endeavoured to put the Act in force, and to recover from the master for not having paid the workman according to the just measure of his work done?—No; if I did wish to do it, it did not lie at my option. I was not the owner of the material got; it was the man who got it who was the owner of it.

1894. But did the men who employ you ever endeavour to put the Act in force, and recover from the master for not having paid them according to the just measure of the work done?—No; they durst not.

1895. Why durst not they?—I have had it in my personal experience. There was one mine where I worked, not the one which I work at now; I complained at that mine of the badness of the roads, and every tub that came out had lost something in consequence. I complained to the fireman, and he and I fell out about it, and he went to the underlooker, and said that I was finding fault with the things in the mine, and therefore I must go about my business.

1896. What is the use of making good laws if the men will not avail themselves of them?—I cannot speak to that.

1897. Why are you here, then?—We come here to see if the Legislature will interfere in it.

1898. When you say, "If the Legislature will interfere," that means making laws, does it not? —The law should be general, I think, in one part of the country as well as in another.

1899. If you dare not enforce the law now, what is the use of making a new law?—But I cannot see in what way we can enforce the law in regard to those tubs which are taken.

1900. The Act says, "Where the persons employed in any coal mine, colliery, or ironstone mine are paid by the weight, measure, or gauge of the coal, ironstone, or other material gotten by them, such coal, ironstone, or other material shall be truly weighed, measured, or gauged accordingly." You say that it is not "truly weighed, measured, or gauged." Now, for every offence against this Act, the master, if the offence were proved, would be liable for 10 *l.* Why have not you before coming here for fresh legislation tried to enforce the existing legislation?—I am speaking of the tubs that are forfeited by being said to be short measure.

1901. According to that Act of Parliament, you have a right to be paid for all that you have raised; there is nothing in the Act of Parliament about the master making any reduction because it may be a few inches below the top? —As you have read that Act, will you please read the Supplementary Rules to that Act, and you will find that they are detrimental and criminatory to the men.

1902. Do you mean by the Supplementary Rules the contract between the master and the men?—Yes.

1903. But surely the men are free to enter into the contract or not as they please?—Yes; but in nine out of ten cases the men do not know what the contract says.

1904. Then why do not they give a month's notice when they are not content?—I cannot speak to that.

1905. *Chairman.*] Am I to understand you to say that you never agree with the head banksman? – In isolated cases I have agreed with him. When I thought that the tubs were too dirty and bad I have agreed with him.

1906. But when you have differed about short measure have you ever got the best of the argument with him?—No, I have not got the best of the

the argument, unless it was written on the tub, "This tub has been upset;" and if I could show him that, then I had the best of the argument.

1907. Supposing that there were a difference between you as to whether the tub was properly full or not, could you get that tub put apart so that the workman might bring the case before the magistrate; could you say, "I do not admit that to be short measure; put that tub aside and we will try that before the magistrate"?—I have never tested it in that way; I do not know whether I could or not.

1908. You might say to the overlooker, I suppose, "I do not admit that; I call upon you to put that tub aside and we will try it before the magistrate"?—I cannot speak to that.

1909. Mr. *Kinnaird.*] You have given evidence about the number of tubs that have come under your notice which have been said to be not properly filled; have you any register of it?—Yes, I have an account here.

1910. Have you distinguished the cases where the tubs were not properly filled?—Yes, I have a note here about every tub and what it was taken for; I have not made a separate account of those that were taken for one thing and those that were taken for another; I have them down one by one.

1911. Mr. *Greenall.*] What would be the average weight of those 6,636 tubs which you say were forfeited?—Every tub should be six hundredweight.

1912. *Chairman.*] And, in fact, they are seven hundredweight, you say?—I have seen three tubs weighed, and the man who bought those three tubs got a ticket, and I asked him how many hundredweight of coals they had, and I could see that 21 hundredweight was put on the ticket.

1913. There are different kinds of coal in the mine, are there not?—Yes, there is the burgy coal; there is what we call king coal; and there is cannel coal.

1914. Is not the king coal much heavier than the burgy?—The burgy is heavier, because it is an inferior quality; that is not weighed at all; the parties who come to the pit head buy that by measure at 1 *s.* per tub.

1915. Mr. *Fawcett.*] Do you think that if you had not been employed to watch the interests of of the men, more tubs would have been forfeited than have been already forfeited?—Yes, I think that more tubs would have been forfeited; because the boys, or any one in fact, had liberty to take them before, and now it is kept betwixt the banksman and me.

1916. Mr. *Greenall.*] Who pays your wages?—The colliers pay me; they subscribe for that object.

1917. How much?—1 *l.* 8 *s.* 6 *d.* per week.

1918. *Chairman.*] Can you prepare an analysis for the Committee, showing what was the number of tubs forfeited for dirt, and what for underweight, and send it in to the Committee?—Yes.

1919. Mr. *Woods.*] I believe you intimated to the Committee, that you did not know what was the get of this colliery?—I do not know that.

1920. Do you think that it is 50,000 tons a year?—I cannot speak to that.

1921. Or 40,000 tons a year?—I could not speak to that.

1922. Could you ascertain it, and send in the information, with the analysis which you are going to give us?—No, I could not ascertain that.

1923. Do you know the number of men employed?—I can form an idea to within a few.

1924. How many do you think are employed?—Between 90 and 100 men, and the most of those men have two drawers; they have a man that works with them at the far end, and one besides to draw.

1925. That is to say, the number is nearly approaching 300 persons?—Yes, altogether.

1926. And are the persons who are said by the Act to be immediately employed by the owners of the colliery in addition to the 300 persons?—No.

1927. How many are there that really get the coal?—Ninety or 94, and each of those has a man to help him to get the coal, and one to draw the coal away; that is the case with the majority of them.

1928. Then, this deduction extends over the wages of about three times 90 persons, is that so?—It has nothing to do with the men that the miner employs; it is all deducted off the wages of the miner who gets the coal.

1929. Mr. *Greenall.*] Can you tell us how many tubs come up in a day?—Some days 60 score come up, and some days 50 score.

1930. Mr. *Fawcett.*] How many tubs does each man send up in a day?—If there is one man and a drawer with him they send on an average from 13 to 14 tubs a day, and when two men are employed at the far end and a drawer, they fill on an average 20 tubs a day; the number of tubs varies; they do not come up every day alike.

1931. Mr. *Greenall.*] You have been employed for 3½ years in the way you describe, and you have seen 6,636 tubs forfeited; that would be about four tubs a day?—Yes; and there are five weeks that I cannot speak for. The average of the tubs forfeited daily for the number of days the men have worked is about nine tubs. One week I was ill; and then, besides that, there is a month that I cannot speak for. I had a metallic book in my pocket, and I roughly took the figures there, and put the book in my pocket; that contains a month's work, and unfortunately I lost that book, therefore I cannot speak to the number that may have been forfeited in that month.

Tuesday, 17th April 1866.

PRESENT:

Mr. Clive.	Mr. Liddell.
General Dunne.	Mr. Neate.
Mr. William Orme Foster.	Mr. Powell.
Mr. Greenall.	Mr. Hussey Vivian.
Mr. Kinnaird.	Mr. Woods.

CHARLES NEATE, Esq., in the Chair.

Mr. William Pickard, re-called; and further examined.

Mr. *W. Pickard.* 17 April 1866.

1932. *Chairman.*] I believe you have turned your attention to the ventilation of mines?—I have.

1933. How far has the first general rule of the Act 23d and 24th of Victoria been observed within your knowledge?—The first rule is not adequately attended to.

1934. What are the chief defects you would point out in regard to the observance of that rule?—The chief defect is the not having a sufficiency of ventilation to render harmless the noxious gases which the men have to work in.

1935. Do you mean that the ventilating furnace has not sufficient force?—The ventilation furnace and the air-ways are not sufficiently large to generate the power of ventilation that is required to render the mines harmless.

1936. In the mines that you have seen, is there any way of testing the amount of ventilation; that is to say, the volume of air which passes in a certain time?—I have been examined on two coroners' inquiries in cases where there was no measurement taken and given in to the proprietors by the subordinate officer, of the volume of air that was circulating in the mine.

1937. What mines were those?—One was the Highbrook Colliery, where the 30 persons were sacrificed in January last by an explosion; and the other mine was the Bryn Moss Colliery.

1938. Has any accident happened in that mine lately?—There were five persons then burnt.

1939. How long ago was that?—It happened in February or March, I think.

1940. There are means of marking and registering, are there not, the circulation of air in the mine?—There are, by the anemometer.

1941. Were there no anemometers in those mines to which you have referred?—They had not followed the practice of taking the measurements. I made it my business to ask the proprietor of the Highbrook, and also of the Bryn Moss, and in neither case was there a measurement of the air.

1942. In other mines that have come under your observation, has there been proper use of the anemometer?—In some there was and in some not.

1943. Where is the anemometer generally placed in the mine?—It is generally placed in the air-courses; both the intake and the return.

1944. Whose business is it to make a note of the amount?—The subordinate officers'; such as underlookers or firemen, and the manager as well.

1945. Are there any mines that you know in which the law has not been complied with, of making a distinct shaft for the ventilation?—I am not exactly aware of any place where the shaft has not been made; but I am aware that there are many places where there need to be more shafts.

1946. What is the average depth of the mines in the district of which you are speaking?—The average would be from 300 to 400 yards; we have them from 100 to 600 yards deep.

1947. Are there many below 200 yards?—Yes; we have a great many such in the Arley Mine.

1948. Is the ventilation in the shallow mines more perfectly carried on than in the deep mines?—No, I cannot say it is perfect; it is far from that.

1949. In the deep mines, what is the extent of the horizontal working in the district you are acquainted with?—They vary; in some of the mines we have them from 2,000 to 3,000 yards, and in some 1,000 yards, and so on, just according to the take of the average of the land that they have to work.

1950. Are there any as much as 3,000 yards in your district?—Yes.

1951. Are there any more than that?—I am not prepared to speak of any that are more.

1952. You are speaking now of the Wigan district?—I am speaking now of the Wigan district exclusively.

1953. Do you mean that there are mines of 3,000 yards of horizontal working with only one ventilating shaft?—Yes.

1954. And in those mines what is your observation as to the sufficiency of the ventilating power?—The deficiency is that they want more space in the upcasts.

1955. The ventilating power is not sufficient, and the air-ways are not sufficiently large?—They are not sufficiently spacious to render harmless the gases given off.

1956. What are the means provided for carrying on the air-ways to the workings?—The means are generally by going under the exploring

ploring workings, that is, the levels or slants. They work by a brattice-cloth.

1957. Whose business is it to fix those brattice-cloths?—The fireman's business.

1958. Not the actual coal-worker, but the fireman's business?—It is the business of the firemen—men set apart for that purpose.

1959. As far as you have observed, is that work effectually done?—As far as the bratticing is concerned, in some cases it is pretty well done; in others, very imperfectly done.

1960. There is considerable difficulty in some cases, is there not, on account of the inequality of the roof?—Yes.

1961. Will you explain to the Committee the way in which the bratticing is carried on?—In some of the cases, I am sorry to say, the master leans too much on the brattice, instead of having more openings cut, and working by the more natural course of allowing the air to be propelled, by making a new slopping. In the case of the Bryn Moss Colliery, the fireman there neglected his duty, and also in the Highbrook Colliery; there was nearly 600 yards, with about 1,700 yards' travelling space for the air, which they had to work by brattice-cloths.

1962. How near do they carry it to the actual working face?—Three or four yards off.

1963. Mr. *Woods.*] Do you mean that air was carried in any collieries in Wigan, along a single place, for 600 yards, by a brattice?—No. At the Highbrook Collieries the amount of brattices is about 550 yards; but all the workings (there are 18 workings) have nearly 600 yards of brattice-cloth divided between them.

1964. *Chairman.*] What is the greatest length in any one case that you know of?—In some cases they would be something like 20 or 30 yards. I walked myself that length with the Government Inspector, in one case, along the brattice-cloth as long as we could. I touched each side of the brattice-cloth.

1965. Mr. *Woods.*] That is to say the men were working at a face which was 20 yards from an opening, a cross-cut, or whatever you call it?—Yes.

1966. *Chairman.*] Have you anything else to suggest as to the imperfect observance of the general rules about ventilation?—I think we want more attention to it. We have men running in jeopardy every day. In some of our principal mines they have to work naked, because the mine is so hot, and that is through deficiency of ventilation.

1967. Have you known an inspector come down to inspect the ventilating process?—The inspectors sometimes go down, but seldom unless an accident occurs.

1968. It is not the habit of inspectors to go down without a special reason?—They know, they say, they are not to go before being sent for.

1969. Have you ever heard an inspector say so?—Yes.

1970. Mr. *Clive.*] Are you aware of the total number of collieries in England?—I am not aware of the total number in England, but in the districts I represent there are about 103; in Mr. Peter Higson's district.

1971. Is it your idea that an inspector should visit those periodically?—Yes, it is our idea that there should be inspections, and that those inspections should be made without the proprietors having the knowledge when they are going to be made.

1972. In fact, that it should be in the nature of an unexpected visit?—Yes, just as the inspectors under the Factory Act never make known when they are coming; and in many cases they pounce upon the proprietors of cotton-mills, and find them working people overtime.

1973. Mr. *Liddell.*] You referred to an accident, attended with loss of life, at a colliery called Bryn Moss, and you said that in that instance a fireman had neglected his duties?—Yes.

1974. Was that proved in the inquiry before the coroner's inquest?—Yes.

1975. What notice was taken by the coroner's inquest of that circumstance?—A strong reprimand was given to the man; they thought that the neglect amounted to an error of judgment, and they did not consider that he was criminally liable for his neglect.

1976. What notice was taken of his having neglected his duty?—Notice was taken in this way, that a strong censure was expressed both by the coroner and by the jury.

1977. And was the Government Inspector of opinion that that reprimand was deserved?—Yes; that it was justly merited.

1978. Do you imagine that, after a reprimand of that kind had been passed on a man, he would be employed in a similar capacity in that mine, or in any other mine, afterwards?—I believe he was employed after it; I am not aware that he has been discharged; the men felt very sore about that, saying that he had trapped five men, as they call it.

1979. Mr. *Clive.*] The jury were of opinion that it was an error of judgment, you say?—Yes.

1980. But "trapping" does not apply to that case, does it?—It was an expression of the men; they called it trapping because they thought it was so.

1981. Mr. *Liddell.*] Are you of opinion that a system of examination of the competency of the firemen to perform these duties ought to be required in all cases?—Yes.

1982. And is it your opinion that, had this man to whom you have referred been subjected to that examination, he would not have been passed as a fireman?—I may say that, in this case, he almost stands out as an exception; he is a very intelligent man, and I was astonished beyond measure when I made the examination of the spot myself, because when I had not been down a second I saw it, as soon as I got to the locality.

1983. Seeing that, should you have concurred in the finding of the jury, that it was an error of judgment on his part, and not a want of knowledge?—Up to a certain point; I gave my explanations in this sense to the jury, that up to a certain point I looked upon it as an error in judgment. He sent two day-wage men to draw some props; these men, in the act of drawing these props, removed some props which were holding up this brattice to propel the air to a certain point. I could show the Committee a plan of the working. (*The Witness did so, and explained it.*)

1984. You have stated that they fixed a lighted candle at a particular point?—Yes.

1985. Is the use of a lighted candle frequent in such cases?—It is.

1986. Do you consider that is a practice which it is safe to adopt where it is known that fire-

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damp exists?—I am sorry to say that in this case the Government Inspector had pointed out the proper policy to work the ventilation, but they frustrated that policy. When the Government Inspector and I examined the spot, we both said that it was deficient in that respect, that Mr. Higson did not make any change there.

1987. I understand you to say that the Government Inspector had actually recommended, previously to the accident, some change in the mode of ventilating that mine?—Yes.

1988. And that those instructions had been neglected by the owner?—Yes.

1989. Was any further notice taken of that circumstance?—I cannot say there was.

1990. You have stated, in answer to a question of mine, with regard to this accident, that a naked candle had been used at a certain portion of the mine?—Yes.

1991. And you have stated that the ventilation of that mine had, in the opinion of the inspector sometime previous to the accident, been declared to be imperfect?—Yes.

1992. Under those circumstances, do you consider that it was wise or prudent to use a naked flame in a pit in which the fire-damp was known to exist?—I did not consider that it was wise or prudent to work without the safety lamp, seeing the slack and indifferent way in which they were regulating the ventilation, and seeing the indifferent action both of the underlooker and of the fireman in attending to the ventilation in the air ways, almost allowing them to get blocked up. Therefore, they ought to have exercised the caution of resorting to the use of the Davy-lamp.

1993. Mr. *Woods.*] With regard to the colliery of which you showed a plan just know, is that an extensive colliery?—Yes.

1994. How many men are employed there?—Not many at a time.

1995. Are there pretty extensive workings in it?—Yes; pretty extensive workings.

1996. What length would you say they are?—I cannot say; I found that there was a deficiency of ventilation after this explosion at Bryn Moss Colliery; I saw that the ventilation was very deficient even when the brattice-cloth was used; I asked the fireman to allow me to see the in-take; I found that the in-take at the bottom of the shaft was pretty good; I spoke to Mr. Higson on the matter, and I said that the in-take was pretty good, but that the deficiency was in the air courses having been allowed to block themselves up by falls of water and dirt, and one thing and another, and where these men were burnt it was very deficient indeed.

1997. Was that place where they were working far from the down-cast shaft?—Yes.

1998. Was it far from the main air road?—It was the extreme of the boundary; they ought to have had a good ventilation there, because there is a larger amount of gas given off.

1999. You stated, some time ago, that some of the workings in the Wigan Coal Field were as much as 2,000 and 3,000 yards; did you mean 2,000 and 3,000 yards from the pit, or from one extremity to the other extremity?—I mean from the pit.

2000. As to the heat which you say is such that men are required to work nearly naked in some mines, have you ever taken observations with the thermometer as to the heat?—I have not.

2001. Mr. *Clive.*] What is the depth of the mine in that case?—I cannot say as to the point where the men have to work naked, but I should hink 400 yards.

2002. Mr. *Woods.*] What colliery are you speaking of?—The California Pit in the Arley Mine.

2003. When you spoke of 103 collieries in your district, did you mean 103 different owners or different workings?—One hundred and three different collieries; we shall have considerably more than that number of different workings.

2004. What is the custom in the Wigan Coal Fields in regard to the employment of brattices; what would you say is the average distance for colliers when driving new places from the crossing to the main air way?—I have worked in different mines; I have had to work in levels and slants where I have had to cut the openings every four yards, and, in some places, every 10, and in the absence of these openings you are obliged to use cloth, especially where there is a deal of gas; I have known a man have to go 50 yards without an opening into the return air course; in some cases the brattice has been attended to, and in other cases not.

2005. Have you known evil results happen in any of those cases where they have gone long distances, such as you mention?—In some cases there have been evil results, but it does not always follow that they manifest themselves. A man suffers in his system through inhaling bad air and through the intense heat, and no one knows how much he suffers but himself and his wife and his family.

2006. Mr. *Clive.*] When you spoke of the imperfect ventilation, did you refer to fire-damp, or generally to bad air?—I referred generally to bad air; not always fire-damp.

2007. General *Dunne.*] Is there any place that you ever knew so perfectly free from damp that it was safe to work in without a safety lamp?—Yes.

2008. May not any place become suddenly dangerous?—Those are very exceptional cases. Where it is very bad work, and peculiar work is going on, I should recommend, in case of a land weight taking place, to work with a lamp.

2009. For legislation, would you recommend that there should be no candles used in any mines?—I would not say so. I am sorry to say that the Davy lamp is becoming an evil instead of a good, because it is becoming a substitute for ventilation.

2010. Then you prefer ventilation for guarding against damp to the Davy lamp?—Yes, as a rule. It is a very exceptional case when there would be any danger arising from either a land weight or a sudden burst of gas.

2011. Then you think that it is rather better ventilation that is required than attending to the use of the lamp?—Yes; we are not dissatisfied with the law about ventilation; it is the execution of it that is not satisfactory.

2012. How would you enforce it?—By having more inspectors.

2013. In your district you said you have 103 collieries, I think?—Yes.

2014. How many inspectors would be required for them?—I should say that the Wigan district itself would require a sub-inspector to make a monthly visit, and that those visits should be reported to Government.

2015. And

2015. And you spoke of their paying visits at uncertain times?—Yes.

2016. That is to avoid any collusion between the overseer and the possessor of the mine?—Yes.

2017. How many inspectors do you think would be needed for the 103 collieries?—I should say it would take two.

2018. Then it would be no great expense that would be involved in a staff for efficient supervision?—No; there should be two sub-inspectors besides the inspector.

2019. Mr. *Clive.*] Are there any iron mines in that district?—No, we have no iron mines.

2020. You think that, having more sub-inspectors and an efficient ventilation should be recorded as the chief object?—Yes, I believe some of the greatest blessings would result from that to the working miners, because inspectors would be there to prevent these accidents occurring. I am sorry to say that in regard to the accidents we have had in Lancashire of late the inspectors have had more to do than they could properly do, to keep up attending to these inquests.

2021. *Chairman.*] Within your knowledge, are the firemen properly qualified for their duties?—I am sorry to say that many are put in that office, not from ability, but from favoritism, and because they are open to do certain work that they are authorised to do.

2022. Is it considered by the workmen that it is a preferment from a common collier to be made a fireman?—It is considered a preferment by some.

2023. Is the fireman paid more than the common workman?—He is put in power more, but his wages are less.

2024. Have you known cases where the firemen are paid more than the common workmen?—There are exceptional cases of that, but very few.

2025. You consider that the firemen ought to be a superior kind of workmen, and that they should have higher wages?—Yes.

2026. Mr. *Clive.*] The colliers are not paid in the same way as the firemen, are they?—No, they are paid by the piece.

2027. And they earn more than the firemen?—Yes.

2028. *Chairman.*] As to propping up the roofs of mines, how is that done in the district within your knowledge; is it done, usually, by the miners themselves?—It is done by the miners themselves, as a rule.

2029. Where do they get their supply of wood?—I am thankful to say that we have got a great improvement in respect of the coal proprietors in our district in finding timber. There are some collieries where they are very deficient in it, but the principal collieries, I am glad to say, are up to the mark in those things.

2030. There is a carpenter attached to the mine, is there not, who cuts the timber the proper length?—Yes.

2031. Where is the supply of timber kept?—It is generally, in the best regulated collieries, carried to the shunts, and the men go there to take what they require.

2032. What will be the average distance of the timber in those cases?—It will vary from 200 to 1,000 yards.

2033. Is it a proper sort of timber that is usually supplied?—Yes, a nice good timber.

2034. Do you think that the workman is better able to do that for himself, or that it would be better done by special persons?—I consider that the nature of the circumstances, in connexion with the daily operations of mining, leads a man to have far better judgment, practically, to prevent any accidents occurring, if he sees to his timber himself. I would leave it to the man to set the timber himself, but not the drawing of it.

2035. You would have somebody employed to bring it to the workman?—Yes. In some of the collieries, I am thankful to say, they have competent men for the thing, but in many cases the men get killed through the want of such competent men.

2036. There is some loss of time to the workman in propping up the roof, is there not?—Not very much.

2037. The time that he gives to propping up the roof, he cannot give to cutting up the coal?—Yes, it is a tax on him in that way, and some of our masters have allowed the men a trifle for the setting of the timber.

2038. You have no great complaint to make, and no particular suggestion as to your district, with respect to propping up the roof?—I have not.

2039. Is there any difference in regard to the ventilation generally, between small mines, or rather mines that are in the hands of small capitalists, and those that are in the hands of large capitalists?—I had occasion to write to the Government Inspector about a small capitalist's mine, that is Mr. Johnson's.

2040. Should you say that the mines in the hands of small capitalists are not so well attended to in respect of ventilation, as those in the hands of large capitalists?—Many of the small capitalists look after the ventilation now, because some of the men make it their business to give me information, and I put the Inspector on them if it is necessary.

2041. The proportion of expense in sinking a ventilating shaft must be greater, must it not, in a mine that has a small area than in a mine that has a larger one?—It must be the same expense in the two cases.

2042. But the proportion will be greater, will it not?—The outlay is greater in proportion, but the ventilation is required equally for the thin mine and for the large mine.

2043. Do you consider that something in the way of a scientific education would be of any advantage to the firemen?—I believe it would.

2044. You do not think that a practical acquaintance with the symptoms of fire-damp, is a substitute for schooling?—It is too much leaned upon, but I think if we had practical and scientific teaching going together we should have more efficient men.

2045. If you had a more learned fireman do not you think he would be trusting a little to his own learning and making experiments?—No, I think not. I think that personal responsibility would debar a man from playing too much with life and property.

2046. Mr. *Liddell.*] A scientific education of a fireman would involve payment of higher wages, would it not?—Yes, a man who required greater ability would naturally look for an advantage in that direction.

2047. Is the office of a fireman a popular office; are most men willing to accept it?—No; we find that many men who ought to accept those

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offices will not have them on account of the responsibility, and the little remuneration for it.

2048. In your opinion it would be desirable to give higher wages, with the object of securing more highly-educated men?—Yes.

2049. Mr. *Woods.*] When you gave that answer just now, with reference to the brattices, did you mean that the air was conducted by brattices for the long space of 600 yards without any cross cuts?—No.

2050. What did you mean by your answer?—I meant this, that at Highbrook we have 1,750 yards of travelling way for the ventilation. Out of the 1,750 yards, which is divided into 18 different sections of the workings, in the place where the 30 men were sacrificed, 550 and odd yards was conducted with brattice-cloth round about 40 different points; from 40 to 46; I will not be certain what the different angles were that this brattice-cloth had to propel the air forward. All that works against the ventilation of the mine.

2051. What was the longest continuous piece of bratticing in that colliery?—The longest I found, as near as I can remember, was something about 30 yards. In the case to which I have referred, I found that that brattice was burnt to dust. The brattice is made of thick linen, steeped in oil and tar, and I found it then just as if it had been in the furnace.

2052. You say that the longest brattice is 30 yards?—Yes.

2053. You mean something like a curtain, do not you?—Yes; there was a scale at the top for the air to escape, and a scale at the bottom. All the air is intended to be taken up by this cloth, but the nature of the cloth will not allow it; it makes its escape both at the top and at the bottom. The amount of air that we found on that occasion was very deficient indeed to meet the requirements of the men, to say nothing of the fire of the mine.

2054. Is this a proper description of a brattice-cloth—a long bit of cloth fastened to the roof of the mine, corresponding to the ceiling, and hanging down enough to touch the flooring of the mine?—Yes.

2055. That cloth is intended for the air to pass up one side of it, and so blow upon the collier at his work, and then pass down the other side of the cloth, and that curtain is suspended in such a manner as to turn a portion of the main air upon the collier?—Yes, that is what it means.

2056. General *Dunne.*] Is that cloth merely in substitution for a better ventilation, or would it be necessary for ventilation?—No; in a case where the ventilation might be termed perfect, it would be necessary for you to take this brattice-cloth to get to a certain length; you are obliged to leave certain pillars. I verified a mine down in Sherington some 20 or 30 years years ago. The gas was so dangerous that it sounded in our ears, and against our lamps, and we had to put our openings every three or four yards, and as the gas checked itself we have gone on to 10, 15, and 20 yards.

2057. Is the ventilation very expensive?—No.

2058. Therefore it is an unpardonable economy, you think, not to have it good?—The best ventilation that we have going can be produced very cheaply.

2059. And the non-ventilation must be attended with danger to the lives of the men working in the mines?—Yes; with danger to the lives of the men working in the mines, and to the property of the proprietors.

2060. And it is perfectly unpardonable, therefore, when that ventilation is not found?—Yes.

2061. Mr. *Woods.*] I believe you will agree with me that brattice-cloth is not usually employed for the main ventilation of the colliery?—Yes.

2062. It is used locally?—Yes.

2063. On what might be called outposts of the mine; the most advanced workings?—Yes.

2064. This system of ventilation by curtains is not the ventilation on which the whole of the mine depends?—No; but those men in those immediate localities are solely dependent upon it.

2065. *Chairman.*] When you were working in that part of the mine, where you had to make your cuttings into the air-way so near to each other, were the cuttings filled up after you went on?—Yes.

2066. Whose business is it to fill them up?—A subordinate officer's, such as a day-wage man or fireman.

2067. Is that work effectually done of filling up these cross passages:—In some collieries it is not well done; in many they put them up with brick and mortar, and in some they just make use of the dirt that the mine makes, and this stuff settles down, and if a fireman is not attentive to his duties, an accident happens.

2068. The most effectual ventilation would be stopping up these cross cuts with brick and mortar as you get beyond?—Yes.

2069. That would be a very expensive process, would it not?—It is not considered very expensive now.

2070. I understood your answer to a previous question to be, that ventilation might be very cheaply done?—Yes.

2071. But if all these cross-cuttings are stopped up with brick and mortar it would be a considerable expense, would it not?—It is an expense, but not in comparison to the amount of efficiency you have for it, because it is being pound wise.

2072. Where it is done, by whom is it done?—It is done by the proprietors; by the subordinate officers, such as brick-setters. They generally have a class of men, metal men and brick-setters, that go together in these workings, one after the other.

2073. They are sometimes stopped up with doors, are they not?—No, the doors are only made use of for opening out to certain workings. I am glad to say that the modern teaching of science and ventilation is knocking the doors on the head.

2074. The proper ventilation, then, is to stop up all these crossways as you go on?—Yes.

2075. And that is not effectually done?—It is not effectually carried out at some of the collieries.

2076. Mr. *Woods.*] Is it not by good underground management that efficient ventilation must be secured, rather than by having a great many shafts?—It is by good management and shafts together. You may have the best management in the world, but if you have not sufficient space for the ventilation you cannot have that ventilation.

2077. Will any reasonable number of shafts secure good ventilation if there is bad underground management?—No; I quite admit that with

with good management, if there are proper means at their command, we may have the best regulations and ventilation possible.

2078. *Chairman.*] With regard to Rule 3, it says, "Whenever safety-lamps are required to be used they shall be first examined and securely locked by a person or persons duly authorised for this purpose." Is that attended to?—As far as the locking goes, I am thankful to say that the system is pretty good. It arises from this: there is a knowledge that the ventilation is not what it ought to be, therefore they take great precautions that the lamps are in proper order.

2079. You have no complaint to make on that head?—No.

2080. Rule 2 is, "All entrances to any place not in actual course of working and extension, and suspected to contain dangerous gas of any kind, shall be properly fenced off so as to prevent access thereto." Is that attended to?—We think that that wants improving; we wish all accessible places to be got at. It is one of the greatest dangers that we have to deal with now, placing off a certain quantity of gas, because a change in the atmosphere will lead that gas to give off and ooze out, and consequently to come upon the lamps of the men; and I have no doubt that such things as that cause many explosions.

2081. Then you find fault with the rule itself?—We find fault with the rule itself; we do not wish to have those magazines to give off. By the natural strata of the mine itself, where there has been white work, a place has been fenced off; we wish a certain quantity of air to operate upon those places.

2082. Although you have given up the working, you would still keep up the course of ventilation into it?—Yes.

2083. Supposing you were to stop the workings up with brick and mortar, would not that answer the purpose?—No, it will ooze through brick and mortar, and it will force them out; it has blown doors down.

2084. Do you mean when it is not in a state of explosion?—Yes; when it is not in a state of explosion. We have had the men's lamps and doors blown down through the fall of the roof.

2085. A fall of the roof would produce a sudden displacement of the air?—Yes; it would be a displacement of this gas, not of air, in these places that are not accessible.

2086. You object then, as I understand, to the rule itself?—Yes, we wish that all places shall be accessible.

2087. Mr. *Liddell.*] Do I rightly understand you that this gas, when collected in large magazines, is liable to throw down any obstruction that it may meet with, provided a displacement takes place?—Yes.

2088. It is not expensive in itself?—No.

2089. General *Dunne.*] Does that gas of itself ever perceptibly diminish in the magazines?—No, it will remain for ever, excepting something special happens.

2090. It will not, in course of nature, exhaust itself by mixing with the air?—If you could get a certain quantity of air to it, it would dilute it, and so it would pass away, but if you have no air operating upon it, it will remain there.

2091. But if you could make air operate upon it, it would be diminished?—Yes; that is what we want.

2092. The operation of the air would diminish it in time?—Yes.

2093. Mr. *Woods.*] I understand you to say, that when the fall of a roof takes place in the mine, and there are persons who are not under that roof, but are, say, 500 yards away from it, such a rush of air comes past them, that the rush of air, not the fall of the roof, overthrows material objects?—Yes; their spades and other things have been knocked down, and they know that there has been an explosion. Mr. *W. Pickard.* 17 April 1866.

2094. Were these things overthrown in what is called in your country the creep of the mine, or were they removed from it?—It was a sudden breaking down.

2095. But were these things overthrown within what is called the creep of the mine, or removed from it?—They were such things as spades and tools; they have been in the working places and stood to the face, and there has not been a second of time warning.

2096. Then you are not describing the rush of air, but the fall of the roof which you were working in immediate proximity with?—And such places which are now made, places not accessible, containing this dangerous gas, which mixes with the atmosphere, when such a fall of the roof happens, it endangers the men's lives; we wish all places to be accessible, so that when this fall of the earth does take place, there will be no carburetted hydrogen to give off, or carburetted gases to mix with the air, and cause this danger.

2097. *Chairman.*] I understood you to mean something like this: that if in this room a mass of earth, enough to cover one-half of the room or two-thirds of the room were to fall in, so that one-half or two-thirds of the room was suddenly filled up, that would be so great a displacement of the air, that it would burst open the door?—No doubt of it.

2098. Mr. *Powell.*] A good deal would depend upon the area of the passage, would it not?—Yes, you have to confine your ideas to a five feet area coming from a 10 or a 15 feet area.

2099. *Chairman.*] It would fill up the greater part of the passage, so as very much to confine the air?—Yes.

2100. Mr. *Kinnaird.*] Are you aware of any accident from your own knowledge where the accident has occurred from what you are complaining of, want of access to these shafts?—Yes; gas has been known to come out in these cases and get upon the men's lamps; it has oozed out, it has not been known where it came from; but an explosion has taken place, and many have been killed in consequence.

2101. Do you remember the names of the places?—I can refer to one at Standish, where we had a place that had carburetted hydrogen in it. This was a place that had been placed off and was not accessible. The man that had the charge of the metal shop had gone out of the way, and another man with him, and this carbonic again came so quick upon them that the man was stripped with the acid and the men heard him dying, but could not get to him through this place having been fenced off. The air operated on the other side of the workings and came right upon this man and killed him.

2102. You have no doubt that this is not a singular instance that you are speaking of, but that it has occurred several times?—It is occurring every day in our mines, through these places not being accessible.

2103. Mr. *Liddell.*] Do I rightly understand that, in the event of a displacement of air taking

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place from a large quantity of soil falling from the roof in such a way as was described to you by the Chairman, that displacement would be sufficient to throw down the actual mason work by which that portion of the mine had been walled off?—Yes.

2104. Then am I to understand that you prefer in all cases to have the old workings open?—Yes; we wish to have them open, and a certain quantity of air to dilute the carburetted hydrogen, and prevent the mischief when this fall comes.

2105. You require the old workings, at all events, to be partially ventilated?—Yes, to be partially ventilated.

2106. Is it not necessary to take security to prevent persons from going into these old workings; are they not described to be dangerous?—Yes.

2107. And how is that done?—A place accessible simply should have "No one allowed this way;" and a place not accessible is generally built up.

2108. But you object to those places being built up?—We object to that.

2109. Is there no danger (of course, there are always reckless men down below) in leaving these places open, that persons will go in at times?—There would be no danger if the ventilation was up to the right point.

2110. Then it requires such an amount of ventilation as would render it safe to work in?—Yes; if it is not safe for me to work in, it is not safe for my lamp to stand in, if it brings it to me 3,000 yards from that point.

2111. *Chairman.*] Is there anything else that you would like to say as to the ventilation and the safety of mines?—No.

2112. Have you any observation to make as to the special rules that have been made in your district?—Yes; we wish the special rules to be modified; they have a very heavy bearing on the men.

2113. The statute requires that there shall be special rules?—I wish to make not a particular complaint on the special rules, but a general complaint. We wish the special rules to take a better and more satisfactory course, and to give the men the privilege of a participation in forming those rules.

2114. You would wish the men to be consulted as to the framing of the rules?—Yes.

2115. General *Dunne.*] As a matter of fact, those rules are made by the proprietors of the mines?—By the proprietors and the Government Inspectors, but there is not such a reasonable consultation with the men as there ought to be about those special rules.

2116. After these rules are made they are then transmitted to the Secretary of State, and authorised by him, are they not?—Yes.

2117. And you wish that the men should be more consulted than they are?—Yes.

2118. *Chairman.*] Are they consulted at all now?—In the honest sense of the term, they are not.

2119. They may be consulted without being formally consulted, I suppose; a manager of a mine may take pains to ascertain the feelings of the men?—The way in which it is done is this: the proprietor puts the rules up in the office, and they are exhibited for a certain time there, and then they are transmitted to the Government Inspector and the Home Secretary. I do not fear to say that there is not one man in a hundred that understands those special rules; they are not submitted to him.

2120. General *Dunne.*] And, therefore, you wish that the men who have practical knowledge should be consulted by the owner before they are made?—Yes.

2121. Mr. *Powell.*] Are those special rules in the sense of being special to each colliery, or are they special rules in the sense of being adopted by each particular district?—They are special rules got up for the adoption of the different districts, and then they have what they term their supplementary rules; any proprietor, as I understand it, should work according to the special rules, but they work more against the man than for him.

2122. Are those special rules agreed upon by the proprietors in each district?—Yes.

2123. Of course, the men must assent to those rules, or they would not work under them?—They assent to those rules because they have no other course; that is the ground of assent.

2124. Is there not a machinery in the miners of the Wigan coal-field to enable the men to combine and resist if they think the rules unjust?—There has not been, but I will not undertake to say that there will not be for the future.

2125. General *Dunne.*] I understood you to mean that the special rules are for districts and the supplementary rules are for each colliery?—Yes.

2126. Mr. *Powell.*] The Committee are not to assume, as I understand you, from the fact that the men are now working under these special rules that they are entirely satisfactory to the men?—They are not.

2127. Mr. *Liddell.*] By the statute, all these special rules are submitted to the Secretary of State for his approval?—Yes.

2128. I presume that the Secretary of State is guided, in coming to his decision, by the inspector of the district, in all cases?—He is.

2129. Then, do I rightly understand that the men are not satisfied with that; that they do not place sufficient confidence in the inspector to trust in his judgment in all cases; that these are rules which ought to be adopted?—They cannot be satisfied, because the rules come with a different operation on the men from their operation on the masters; they think that they ought to have a hand in making those rules, seeing that it is a mutual engagement betwixt capital and labour.

2130. *Chairman.*] Have you anything to say with respect to your district, as to trucking, or anything similar to trucking?—I am thankful to say that that has almost gone by.

2131. You have no complaint to make on that head?—No. In some collieries they have to purchase powder and candles; there is a sort of coercion brought to bear upon them, to purchase powder and candles. That is the only form of it.

2132. As to the sharpening of the tools, how is that generally done in your district?—In many of the cases it is left with the men; they either do it themselves or they employ a man and pay him.

2133. The workmen themselves do it, you mean, sometimes?—Yes.

2134. In any colliery that you know, is it the case that the master finds somebody to sharpen the

the tools?—No, I do not know any such case; if he does the men have to pay.

2135. Do you know any case in which the men have had to make any regular payment for the sharpening of their tools?—Yes; it is a common thing with us, but they generally employ a man for themselves; they pay him so much per fortnight.

2136. It is their own arrangement?—Yes.

2137. Have you anything that you wish to say on the subject of juries?—We wish a change to take place in that; and that when a jury is called together, upon accidents in coal mines, that jury should be comprised of practical men, or partially so, so that they may enable the jury to get at facts, from asking those questions which none but practical men can really put to a witness; not that we doubt the intelligence of the gentlemen who comprise those juries now, but they have not the practical knowledge.

2138. How are they composed?—They are composed of tradesmen, shopkeepers, and so on.

2139. Have you had any reason to suppose that they are under the influence of the mine-owners at all?—Too often I have seen that influence at work. There are certain parts of the district now that I could point out where those effects are felt.

2140. Are the men satisfied with the fairness of the juries?—Not as a rule.

2141. What definite suggestion have you to make as to the composition of the juries?—I should say that at least six practical men should be drawn from another locality.

2142. What do you mean by practical men; miners?—Yes, I mean miners.

2143. Drawn from another district?—Yes; not from the same colliery.

2144. Who would the other six be?—I would allow them to be tradesmen, as they have been hitherto.

2145. General *Dunne.*] Who selects the juries?—The Inspector of Police generally has to select them.

2146. Are they taken from the panel that forms the ordinary juries for country purposes?—Yes; in some cases not.

2147. You would have a special provision that some of them should be practical men, knowing the work in mines?—Yes.

2148. Mr. *Hussey Vivian.*] Of what class would you have those practical men?—I would have them working miners, working in similar work to those who were in the accident.

2149. The whole six men should be working miners?—Yes.

2150. You would exclude viewers altogether, would you?—Yes.

2151. You would exclude under-viewers?—Yes.

2152. You would exclude overmen?—Yes.

2153. You would exclude masters?—Yes.

2154. You would exclude all parties interested in the mine?—Yes.

2155. You would have half the jury composed simply of working men?—Yes.

2156. You have had experience in mining, I believe?—Yes.

2157. Do you consider that miners generally are competent judges of the general arrangements of a pit?—I am thankful to say that they would be competent to put practical questions to enable the jury to come to a reasonable verdict.

2158. Would they be competent to judge of the general arrangements of a pit?—Yes, I know many a man more competent than the masters themselves to judge of them.

2159. Are they as a rule?—As a rule they are not.

2160. I suppose the bulk of the ordinary working miners could not be charged with the management of a pit?—No.

2161. You are not a manager of a mine, are you?—No, I am the agent of the miners in the Wigan district.

2162. You can hardly tell me, perhaps, in what way generally the overmen and the superior officers of the colliery are selected?—Some are selected from their meritorious character and a great many of them from favouritism.

2163. They are generally selected from being workmen of superior intelligence, are they not?—In some cases, not always.

2164. General *Dunne.*] They ought to be, but are not, you say?—Yes.

2165. Mr. *Liddell.*] Your object in the constitution of the jury of course is to obtain an impartial judgment upon the facts submitted to the consideration of the jury?—Yes.

2166. You would like it to be composed, to the extent of at least half the number, of working men?—Yes.

2167. Do you think, in the first place, that working men would always be certain to pass an impartial judgment upon facts connected with the explosion of a mine?—Yes, I believe they would, and there would be the influence of the other six if they had their minds biased in any other way. Our object in wishing to have practical men on coroners' inquests, is to bring out facts bearing upon the accident.

2168. I understand you to object to the working men for the juries being taken from the pit in which the accident has happened?—Yes.

2169. You think that they would be liable to be partial?—They might be liable to be partial, and that partiality might lead them in a direction that might not answer the ends of justice

2170. Therefore, what you want, as I understand, in these six, is practical knowledge; you do not care about their being connected with the workmen, so long as they bring practical knowledge and experience to bear upon the investigation?—Just so.

2171. Do you think that there would be no danger on the part of the other half of the jury who are impartial men, but men uninstructed as to the working of the pit, that they would be likely to be overborne by the practical knowledge of the other six?—I should say not; I should think their intelligence would lead them not to be overborne in that respect for which they are there, namely, to give a verdict upon the facts.

2172. Mr. *Kinnaird.*] Your reason for wishing a change in the juries is that you think they have not given proper verdicts?—Yes.

2173. You think that has proceeded from their ignorance of the practical working of the mines?—Yes, in some cases; and I do not hesitate to say that in the High Brook case the verdict was not in accordance with the evidence given.

2174. General *Dunne.*] What was the character of the jury in that case?—They were gentlemen in connection with the coal trade, moving in official capacities some of them.

2175. They were interested persons?—Yes, interested persons.

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2176. Which made the verdict suspicious, of course?—Yes.

2177. Mr. *Greenall.*] You disapprove of the juries, as they are at present constituted, owing to the absence of certain parties, and those parties being absent, the whole circumstances of the case do not come before them, you think?—Yes.

2178. Have you in your experience ever met with a case in which you have thought the verdict has gone contrary to the evidence given?—Yes; I refer now to the case of the High Brook Colliery, where 30 persons were killed.

2179. But your present great objection to the juries being so constituted is, that the full facts are not brought before them?—That is my objection.

2180. And you think that would be remedied if they had men of practical acquaintance with the subject on the juries?—Yes.

2181. Mr. *Powell.*] This is a photograph taken of a woman employed on the pit brow of a mine in the Wigan coal-field; do you consider that a fair representation of the dress of the women so employed (*handing a photograph to the witness*)?—Yes; there are hundreds of them like that.

2182. In wet weather, I suppose, they have a shawl for protection?—They do not generally have a shawl; they have a jacket, or a man's overcoat, or what they can get; sometimes they need more than one on a day when it is wet.

2183. They are frequently seen in the town of Wigan in that complete dress, with a man's overcoat and that costume?—Yes.

2184. I do not wish to draw from you a repetition of your evidence as regards the morality on the pit bank, or the degrading effect of the employment on women, but confining yourself now to the health, do you think it is injurious to their health?—Yes.

2185. Are there not many young women in the neighbourhood of Wigan whose health failed in the factories who became strong when working in the open air on the pit's bank?—There are those cases, but they are very exceptional.

2186. Taking the factory girls on the one hand, and the colliery girls on the other hand, as they appear in their Sunday morning attire, should you say that the physical appearance and condition of the colliery girls is inferior to that of the factory girls?—No; I should say not.

2187. General *Dunne.*] But you altogether object to the employment of women in labour of that kind?—My great objection to the employment of women on the pit banks in Lancashire is its total degradation.

2188. Mr. *Powell.*] Assuming that there are serious objections to the employment of women on the pit's bank, do you think that it might be safely left to the operation of improved public feeling to limit the supposed evil, or would you interfere by legislation?—I would equally interfere by legislation, as they did in 1842.

2189. Do you think that the employment of women will increase or diminish in the district?—I think the competition in Lancashire will keep it on.

2190. But at the present time there is a scarcity, and there being that scarcity why should not the women go into factories rather than on the pit's bank?—There is a peculiarity among some of the girls that they will take their own course as long as the law allows them.

2191. Is that increase which you allude to larger than the increase of collieries, or is it in proportion to their increase?—There are as many as 40 or 50 on a colliery sometimes.

2192. You think, do you not, that there is an improvement in education in the sense of book learning amongst the colliery population?—Yes; I am thankful to say that our boys have made an improvement over our men.

2193. Do you find that the lads who are engaged during the ordinary hours of school in the pit attend night school?—Some of them; but some of them are so fatigued that they cannot.

2194. Are those who attend night schools chiefly those who are ignorant of the very rudiments of education, or are they those who have had a pretty fair education and desire to improve it?—I find that with those who have improved, the influence of Sabbath schools has had a great deal to do with it.

2195. You think that the rudiments once neglected are continuously neglected?—Yes.

2196. And that there are growing up now, in the Wigan coal-fields, many young men and young women ignorant of the very elements of education?—Yes; hundreds who can neither read nor write, growing up into married life.

2197. Is there an increase in the Sunday schools?—I do not know that there has been of late years.

2198. Are you a Sunday school teacher?—I have been one.

2199. Do you think that much general instruction is given in the elements of education at Sunday schools?—Yes.

2200. In reading, I suppose?—Yes.

2201. Writing and arithmetic are not taught on the Sunday, are they, generally?—No, not as a rule; some Sunday schools take up writing as well as reading.

2202. Are those free schools with voluntary teachers in connection with places of worship?—Yes.

2203. But those are rare cases?—Yes, very rare cases.

2204. Can you give the Committee the hours of work, beginning with the men; what time do the men usually go down the pit?—They go down at four in the morning, and they stay till from 4 o'clock to 6 o'clock at night.

2205. Take the boys; what are their hours?—The boys are working, I should say, on an average, 12 hours a day.

2206. Will you give the hours they begin and the hours they end?—They go with the men in the morning; generally they go from 4 to 6 o'clock in the morning, and come home at from 4 to 7 o'clock at night.

2207. The men who go down at 4 o'clock, I presume leave at four; they do not remain till six?—Some of them do; there are plenty of cases where we have men down in the pit 18 hours.

2208. Does the number of hours for which the boys labour depend upon the age and strength of each individual boy, or does every boy labour for the same length of time?—He labours for the same length of time; it does not depend upon age and strength at all.

2209. Do the boys come up with the men or remain after the men?—In some of the best regulated collieries they will not allow a man to come and leave the boys down lest something should happen; there are some of them that do

so, but in the best regulated mines they will not allow it.

2210. Take the average of collieries; would not a certain proportion of men come up every day, leaving a certain staff in the pit?—Yes; some men perhaps will come up at 2 o'clock and 3 o'clock, and will leave their boys down.

2211. That is the practice, is it not?—Yes.

2212. As to the hours that the women labour; what time do they commence their labour?—They commence at 6 o'clock in the morning and go on till 6 o'clock at night at the collieries.

2213. What intervals for meals have they?—Just as they can catch them; sometimes five minutes or a quarter of an hour or half-an-hour for breakfast, and 20 minutes or half-an-hour or an hour for dinner; where there are many galloways used, they are obliged to stay to feed the horses.

2214. There is no hour, or hour and a half for dinner as a rule then?—There is in some collieries, but it is not the rule.

2215. Those being the ordinary hours of labour in the pit, how many days in the week do the men usually labour?—They will average from 10 to 12 days a fortnight. There are men associated with drinking customs, I am sorry to say, who will only work seven or eight days in the fortnight.

2216. What proportion would those comparatively indolent men bear in numbers to the more industrious?—I am thankful to say that the industrious are the majority.

2217. The days' labour of the boys follows the days' labour of the men, I presume; when the men work many days their boys work many days?—Yes.

2218. Is the labour of the women as uncertain as that of the men and boys, or is it more constant?—It is constant.

2219. They are not liable to those fits of irregularity which attack boys and men?—No, except that that irregularity of the men leads to an irregularity in the women having labour for them on the surface; but as a rule the girls are employed six days a week, winter and summer.

2220. Have you breaks for fairs and fasts and festivals of various kinds?—Yes.

2221. Can you at all say how many days' labour in the year would be wasted on account of those extraordinary occasions?—I am sorry to say too many; I cannot say how many.

2222. Taking those festive occasions, and also taking the number of days when the men are idle, the number of working days in the year is much smaller than, before inquiry, one would at all suppose; many days are lost?—Yes, many days are lost.

2223. You cannot give us any idea how many are lost in that way?—I cannot say; I teach the men to work 11 days in the fortnight, but the wages are not such as to lead them to do it as a rule.

2224. Do you find the men spend their holidays in cheap trips and so on, or in frequenting the public-houses?—The public-houses are too much frequented.

2225. With regard to the Mines Inspection Act, the 23d and 24th Victoria, there is a certificate required by that Act from a competent schoolmaster, in the case of any boy under 12 employed in a mine?—Yes.

2226. So far as those provisions are regarded in any degree, is the competency of schoolmasters investigated?—No; since I and my colleague have been before this Committee, they have been looking more carefully into that, and discharging the boys under age and taking generally important steps for having their education attended to.

2227. Do you think that the parents will aid the masters in enforcing more strict compliance with the Act, or the reverse?—They often wish to keep the truth from the masters as to giving the ages. I cannot for my life, in some cases, get the age of a boy myself. I have applied in various cases to get it, but I cannot.

2228. Even with your experience of the stature and growth of the lads, you have found that difficulty?—Yes.

2229. Do you think that parents pay any greater attention to the education of their young children, with a view to them obtaining a certificate?—No; I do not think it is properly attended to.

2230. You think that is no stimulant during the earlier years of life?—No; it is so little attended to in our district that it is generally become a matter of doubt whether they mean to take any notice of it. The parents make a statement and the boys are allowed to work on that statement.

2231. Do you think that the parents are willing to submit to more strict legislation?—Yes; intelligence is leading the parents to consent to that course.

2232. You think that the advance of education is creating a sense of the necessity of it?—Yes; they think they have suffered long enough themselves, and they wish the children to be better off.

2233. Do you think that the feeling of ambition acts upon them; any feeling that the child has no chance of getting on in life unless education be given?—Yes; many have that feeling.

2234. You gave some important evidence as to compulsory education, giving your opinion in favour of it; do you think that that opinion is general through the district, or is it confined to yourself and a few others?—I think the strong feeling amongst the men is that if ever we are to do any good to the miners we must have compulsory education.

2235. Supposing there were an Act saying that if two-thirds of the miners in a district desire it, there shall be compulsory education, do you think that Act would be adopted in the Wigan district?—Yes.

2236. You suggest the propriety of retaining boys up to 12 years of age before they work in a pit?—Yes.

2237. Do you think that a boy who had not been down a pit till he was 12 would be happy in underground working, and would become a useful collier in later life?—Yes.

2238. Do not you think that the contracted attitude and the long confinement would be intolerable to a boy who had had no early training?—I think a boy who went in so early as they have done would have no chance of either physical or mental development.

2239. I want to know whether you think that if all the boys of a district did not go down a pit till they were 12 years of age, they would become useful and steady working colliers?—Yes, I think they would; and those that had to get their bread in the mine would fill their spheres with

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far more credit to themselves and their employers.

2240. You were asked a question as to the truck system; the Wigan district is, I believe, a populous district?—Yes.

2241. And there is an abundant supply for the men by means of shops, which persons are willing to take who carry on a retail business?—Yes.

2242. So that there is not the least necessity in that district for anything corresponding to the truck system?—No.

2243. With regard to the Saturday half-holiday, you gave the hours of labour for men, boys, and women; but are the hours shorter on a Saturday?—No, they have not been; the men are taking steps to make them shorter, I believe, on the pay Saturday.

2244. On the Monday do they go down later?—Every other Monday, as a rule, it is play day; the collier wants a day to get his tools in order.

2245. On the other Monday, when it is not play day, are they at the pit at the same time as usual?—In some of the collieries, those who are not there by five o'clock in the morning are not to go down that morning.

2246. As a general rule, how far are the homes of the colliers from the pits where they labour?—Half-a-mile to three miles; in some cases four miles.

2247. On the average, how far?—A mile or a mile and-a-half.

2248. Mr. *Kinnaird.*] Do they pay rents, or are their houses provided for them?—They pay rents generally.

2249. What are the rents of the colliers generally?—The rents vary from 1*s.* to 2*s.* 6*d.*, or 3*s.* or 3*s.* 6*d.* per week.

2250. You have said that since the inquiries instituted by this Committee you have seen some changes already for the better?—Yes.

2251. Would you tell us a little more definitely what changes you have seen?—In this way: the subordinate officer, say, is going round and asking the men what ages the boys are; and I have been informed that when they are not up to a certain age they will stop their employment. A great many of the masters are beginning to act on the principle of not having any boy on the mine till he is 12 years of age; and one coal proprietor has expressed himself to me since I was examined here, that he would not have a boy in his pit under 12 years of age.

2552. Those are the benefits that you anticipated by an inquiry of this nature, I suppose?—Yes.

2253. And do you think that the fact of this inquiry going on will call greater attention to the existing rules for the management of mines?—Yes.

2254. Have you not seen a great improvement in the condition of the miners within the last 20 years?—Yes; there is a great improvement, I am thankful to say.

2255. Is that going on from year to year now?—Yes.

2256. And you attribute that, in some measure, to the regulations which have been made forbidding women to work in mines?—Yes.

2257. Are you aware of any instances, from your own knowledge, of great benefit resulting to the social condition of the people where the women have been prevented from going down the mine?—Yes; I attribute that to the Act of 1842; some of our colliers now in the Wigan district were trained under that system, and now the mothers at home can give better attention to the children.

2258. Do you believe that the bodily health and strength of the women have been improved too?—Yes.

2259. I think you said that the women work at least for 12 hours at the mouths of the pits?—Yes.

2260. In all weathers?—Yes.

2261. I think Lancashire is rather a wet district, is it not?—Yes.

2262. They are constantly, during that time, wet through?—Yes; two or three times in a day sometimes.

2263. Do you believe that a woman who has been working and accustomed to this kind of hard work at the pit's mouth, could possibly take to any other calling, as has been suggested?—Yes; many of them do.

2264. Can she get work at a factory if she wishes?—Yes; but there is a peculiar taste in some girls that will lead them to go on the pit banks as long as they may.

2265. You think that for the sake of morality, and every other consideration, you should have a legislative enactment to prevent women working in that way?—Yes.

2266. You do not consider it employment fit for women?—I do not.

2267. Is that the general feeling of the miners?—That is their general feeling.

2268. On what day are the wages paid; is it on the Saturday?—On the alternate Saturday, generally.

2269. Do some of the wives of the colliers keep shops, and by means of those shops help their husbands?—Yes; some of them keep shops.

2270. And no doubt, if they were not employed so, there are various ways in which they might help equally beneficially to their families without working on the bank?—Yes.

2271. Mr. *Powell.*] Perhaps some keep beer-shops?—Yes, too many.

2272. Mr. *Kinnaird.*] Is the operation of Sunday schools, to which you alluded, in full force now?—Yes.

2273. And you attribute, do you not, almost the entire education of some to the instruction in those schools?—Yes; I should say, if inquiry was made, you would find that the greater number of men derived their education from the Sunday schools and not the day schools, because they were employed so early.

2274. That is under voluntary teaching?—Yes.

2275. Mr. *Vivian.*] I suppose you would object to the employment of women in any out-door labour?—On the pit's bank, I would.

2276. In any out-door labour, would you?—No, I would not say that.

2277. What would the distinction be between labour on the pit's bank and any other description of labour?—I am not prepared to speak on the other kinds of labour which you refer to, not having a knowledge of them. I know that, in a social point of view, the effects are very bad in our district.

2278. You have a general knowledge, I presume, of agricultural labour in which women are employed; can you draw any distinction between agricultural labour and labour on the bank?—Yes; in the first place, you only have two seasons of

of labour in the agricultural districts, while you have all four on the pit's bank.

2279. General *Dunne.*] Is there not a great difference in the actual labour also?—Yes.

2280. Mr. *Vivian.*] I can easily understand the difference in the employment of women underground; but if the employment is overground, it is not clear to me (perhaps you can make it more clear) what the difference is?—In many cases there is very little difference between the former underground work of the girls and their labour now; they just go along the heaps, and down to the bolts and waggons, and there they are employed in lifting and heaving, the same as they are down the mines.

2281. The difference is between light and darkness, is it not?—Yes.

2282. That is material?—Yes; but the amount of labour is not all of it.

2283. However degrading it may be, it need not be immoral, I suppose?—It need not be, but the association is most degrading.

2284. You can draw no distinction between such labour and other labour of women out of doors?—I think there is a distinction; the labour is more excessive on the mine.

2285. Still it is voluntary, is it not?—In some cases.

2286. Are there any cases in which women are compelled to work?—Yes, too many.

2287. By whom?—By their parents and by their husbands.

2288. As to compulsory education, would you propose to accompany any enactment for compulsory education, with compulsory rates; or in what way would you propose that these schools should be provided and maintained?—I am not prepared to say whether it should be by rate or by subscriptions forced upon those that you give education to; but it is desirable that the education should be given to them.

2289. If you provided compulsory education, you must at the same time provide schools, must you not?—Yes.

2290. In what way would you propose that those schools should be supported?—The best way would be for Government to take them in hand.

2291. Then it is to be done at the expense of the nation?—Yes.

2292. As to the hours of work, is it the custom in your district for the boys and men to go in to their work at the same time?—Yes.

2293. In what way are the boys employed?—When they get down to the bottom, if there is any coal, they fill the tubs, and if not, they assist their masters in other ways.

2294. But there never is coal when the man first goes down in the morning, is there?—Yes; a man who regulates his work well will generally have some left for the morning, and he gives his boy a chance to get his work done in reasonable time.

2295. Must not a considerable length of time precede the bringing on of the coal by a man?—The nature of the work varies very much. In some cases you will have a man working in a set place for a long time. I have worked six hours as hard as I could pelt at it before I could get any along.

2296. If your boy went in at the same time with yourself, the whole of that time would be wasted by him, would it not?—No; a well-regulated miner puts out a certain quantity each day, and it is not all taken out that day; some of it is left for the next day.

2297. As a fact, in your district the men and boys go in together?—Yes.

2298. Is it unusual in other districts for the men and boys to go in together?—I cannot speak to that; I know the fact in ours.

2299. What did you mean by reasonable wages, when you said that you recommended the men to be satisfied with reasonable wages?—I consider that reasonable wages for a reasonable day's work are from 5*s.* to 6*s.* a day. With the physical exertion the miner has to undergo, he requires considerably more food and clothing than an ordinary working man does.

2300. Is that the amount of wages you would suggest for a day's work of 12 consecutive working hours?—I should say for eight hours.

2301. But at present they work 12 hours, as I understand you?—Yes, 10 and 12 hours.

2302. Consequently you would advocate an increase of 33 per cent., would you not; that is to say, one-third, in the wages of the workmen; if they now get 5*s.* or 6*s.* for 12 hours, and you propose they should get the same for eight hours, you would propose a reduction in their time of working to the extent of one-third?—Yes; I mean to say that the physical exertions that the men are putting forth every day are very injurious to life. The colliers die under 27 years of age on an average, and it may become a question where our miners shall come from in future generations.

2303. No doubt that is a great problem; but is the fact you speak of due to excessive labour or bad ventilation?—It is due to excessive labour and to bad ventilation together.

2304. Do you attribute it more to excessive labour than to bad ventilation?—Yes, more to excessive labour.

2305. Are the men paid by the day, or by the quantity of coals they cut?—By the quantity of coals they cut; by the yards of scorage.

2306. If they choose to remain in for 12 hours it is a matter upon which they exercise their own free will, is it not?—Yes.

2307. The longer they remain the more they cut?—Yes, up to a certain point; a man cannot go much beyond that.

2308. Still he is the best judge of that, is he not?—Yes. When a man has been eight hours at work his natural strength is gone.

2309. But he is the best judge of that, is he not; he is free to leave when he likes?—In the majority of cases he is free to leave; in some cases the masters will force a certain quantity of work to be done before they allow a man to come out.

2310. That is to say, they will not allow a man persistently to come out after having been but a very short time in the pit; they must calculate on some amount of work from him?—Yes. In some cases a man has been kept waiting at the bottom of the shaft, almost starving, after working 8 or 10 hours, till there are 10 men to come up. Many of our men have had to lie in bed for weeks through what they have had to suffer in that way.

2311. You mean waiting to go up?—Yes.

2312. Has not a man the power of getting into the cage when he likes?—No, the special rules, which they call the private system of contracts, has brought that abominable system about. The

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men have to wait till there are 8 and 10 at once to come up out of the mine.

2313. What depth is your mine?—Some of them are 600 and 500 yards, down to 100.

2314. Where the rule is that 10 men must come up at a time, what is the depth?—Three or four hundred yards.

2315. Are they generally double cages or single?—What we call double-deckers—two boxes in the first and two in the second.

2316. How many men rise in each?—Eight and ten men at once, on the top.

2317. And coal underneath?—And coal underneath, but not many of them send coal up with the men now.

2318. Mr. *Liddell.*] You have been asked how it happens that though women could get work in the factory, they still prefer to go to the pit's bank for work; I want to know whether that does not arise from the natural desire of all women to wear the breeches?—Indeed I cannot say; there may be that disposition on the part of some; in fact, I see it manifest in their actions.

2319. But when we talk of a woman wearing the breeches, we mean that she likes to have her own way, do not we?—Yes.

2320. You are disposed to prevent the women from having their own way by legislation?—Yes.

2321. Are you sanguine as to the success of legislating for women's wills; do you think you will be able by legislation to effect your object?—Yes, I am very sanguine from the success of the alterations made by the enactment of 1842; but we do not wish this to take effect as suddenly as that did.

2322. Are you in a position to say that there is a very strong public opinion to assist legislation in this matter?—Yes.

2323. Will you state what wages the women earn?—They earn from 1*s.* to 1*s.* 6*d.* per day, for 12 hours' work.

2324. If a man did the same amount of work, what would he earn?—From 2*s.* to 3*s.*; there are men engaged at the work who receive that.

2325. Then a man doing the same amount of work, in the same amount of time, would earn about twice the amount that these women do?—He would earn from 2 *s.* to 3 *s.*; and they earn from 1 *s.* to 1 *s.* 6 *d.*

2326. Consequently no man would be willing to do the same amount of work for the same amount of wages?—No.

2327. You have spoken of the death-rate, and I was very sorry to hear that it was so high as you describe among the colliers in your district; have you ever compared the death-rate in your district with the death-rate in other districts?—I was giving the national statistics. When I said under 27 years of age, that is the average mortality of the mining population of England, Scotland, and Wales.

2328. Is it higher in your district than in other districts?—I do not say that it is higher with us; but I think we do rather more than our share in Lancashire, owing to bad ventilation and other causes.

2329. Do the young miners (I do not want to cast any undeserved stigma upon them), for the most part employ their leisure time in excess; should you say, in fact, that the colliers have very high wages, and that when they are off work (of course we all know that they are fond of amusing themselves), the habits of the young men are loose habits or steady habits?—I have to put them into two classes. There are some rather excessive in those amusements and associations which have a tendency to bring down the manhood of men; and we have others that take a judicious and proper course, seeking to improve their minds.

2330. I want to come at the very important fact, whether or no a considerable amount of excess among a large number of the pitmen, coupled with those two circumstances which you have mentioned, would account in a great degree for the high rate of mortality of which you have spoken?—No, I should say not.

2331. You do not think, as a matter of fact, that they go into excess more than other labourers?—No; I find other classes of society mixing with them, and they are not in the least worse than others in that respect.

2332. Mr. *Greenall.*] You have expressed an opinion on the present rate of wages; did I rightly understand you to say that you consider that the present wages which the colliers receive are too low, regard being had to their excessive expenses for food and for clothing?—Yes.

2333. You intimated an opinion that, under a better state of things, the collier ought to work eight hours a day, and that for the eight hours he should receive the same wages that he receives now for the 12 hours?—I should say that he should receive from 5*s.* to 6*s.* a day.

2334. Do you think that 36*s.* might be expected to be earned in the week for eight hours' labour which are now earned for 12 hours' labour?—Yes.

2335. *Chairman.*] What proportion of the women on the pit's bank are married?—A good number of them.

2336. Are they chiefly married or unmarried?—Chiefly unmarried girls; but a good many of them are married women, some whose husbands have left them.

2337. But those are living as single women?—Yes; then there are a few widows also.

2338. But of married women whose husbands are also employed there, are there many?—There are not many of them.

2339. Mr. *Greenall.*] Do you know the glass works in the neighbourhood of Saint Helen's?—Yes.

2340. Do you know the work that the women do in those works?—I do not.

2341. *Chairman.*] Do you notice any difference between the better educated workmen and those that are less educated as to the way in which they pass their time; are the men who get drunk the educated workmen or not?—The men who get drunk are not the educated workmen.

2342. Some of those educated workmen get drunk, I suppose?—There are a very few of them that do.

2343. You think that the improvement of education among the workmen improves their conduct generally?—Yes.

2344. Mr. *Woods.*] You spoke of the average death-rate of the mining population; how is that obtained?—I cannot say how that is obtained; but I have seen it.

2345. Is it true that the coal mines are much better ventilated than the metalliferous mines?—I have to speak from report; but from what I have read I think it is the fact that they are.

2346. General *Dunne.*] Are the metalliferous mines subject to damps too?—Yes, they suffer most

most fearfully; in regard to mortality they are below the coal mines.

2347. Mr. *Woods.*] Is it correct to say that the parents of the women solicit the employers on the mines to take them into their service?—In some cases.

2348. You heard the evidence of Mr. Baxendale a few days ago, probably?—I did.

2349. Do you agree with his answer to this question; he is asked: "Will you tell the Committee how many hours it would take per day to make 5 *s.* or 6 *s.*?" And his answer is, "What I mean is, to tell the Committee that I am satisfied if I have worked six hours, and if I work any longer there is something detaining me"?—He is speaking there of himself, as an individual; he is a strong, powerful man, as the Committee might see; he is an exception to the rule; he is beyond what I should call an ordinary workman. I looked upon myself, when I was in the mine, as beyond ordinary workmen; but as an average the men cannot be expected to work beyond eight or 10 hours a day; we have cases where men are working less than that, and getting those wages, but there are very few cases of that kind indeed.

2350. Do you agree with him when he says that he works 10 days in the fortnight, sometimes 11, and sometimes eight or nine, when the men are stopped from working by break downs and accidents, and so on; do you agree with him in saying that the average number of days' labour is 10 in the fortnight?—Yes; there are some who do not work that, but the majority are open to 10 and 11 days' work.

2351. What do you put down as the average number of hours that the collier works in the Wigan coalfield?—Ten hours.

2352. Do you mean down in the pit?—He is working something like 10 hours.

2353. How long do you consider that he is down in the pit, on an average?—I should say that he would be on an average 11 hours.

2354. Do you think it is true that the Mines Inspection Act has placed a degree of responsibility on persons employed in the mines which did not attach to them before?—Yes.

2355. And do you think that that degree of responsibility placed upon the persons employed in the mines has contributed to the increased safety of the mines?—Yes; it has contributed to the increased safety of the mines, and would have done that more so had we sub-inspectors to enforce it, and point out the defects.

2356. When you spoke about the little difference that there was between women working under ground and working above ground, had you borne in mind that in working under ground in mines that are three feet high they must necessarily work in a recumbent position?—Yes, and in attending to their duties they have to be in a recumbent posture on the pit bank also.

2357. But they can stand erect on the pit banks, cannot they?—Not to do the work. They stand in this way (*describing it*); the tubs are as large as this table, and they must propel them forward in the attitude that I have described.

2358. Surely there is a difference in doing work in a place three feet high, and doing work under the sun?—Yes, a great difference.

2359. Mr. *Powell.*] In answer to one question which was put to you, you spoke of schools being provided at the expense of the nation; you did not imply that those schools were to be free schools?—No.

2360. But you would think, perhaps, that a weekly payment should be made, as is the case with ordinary National schools, at the present time?—Yes.

2361. You find an increasing attention to the subject in the Wigan district, do not you?—Yes, I am thankful to say that there is.

2362. Do you think that it is overtaking the population?—I think it is coming on pretty well.

2363. In the case of the schools that you spoke of, provided at the expense of the nation, you would allow a certain voluntary contribution, as is the custom now, would you not?—Yes.

2364. All that you meant was, that you think the State might furnish a stimulus?—Yes.

2365. With regard to the 5 *s.* or 6 *s.* a day which you spoke of, was that the desired gross wages of the collier, or the wages that he was to have for himself, after paying all his expenses, tools and candles, and his various expenses?—His net wages after all his expenses.

2366. I must call your attention to a slight discrepancy between an answer given to me and an answer given to the honourable Member for Wigan; you told me that the men were down from four in the morning till four in the evening, and you answered him that they were down 11 hours a day, which was correct; the answer that you gave to the honourable Member for Wigan, or the answer that you gave to me, 11 hours or 12?—Some are down 13 and some 14 hours.

2367. I am not asking about extreme cases on one side or the other, but the ordinary practice of the district?—The ordinary practice of the district is for men to go down at four, and to start coming out at two, and three, and four o'clock, and some men will be down as long as till seven o'clock.

2368. Does that great variety of hours depend upon the will of the proprietor of the pit, or upon the will of the individual collier?—A great deal is the will of the individual collier; as long as he works by piece-work, he can come out earlier if he thinks proper, but as a rule they confine him to stay down till two.

2369. That is to say, 10 hours?—Yes.

2370. Mr. *Woods.*] I believe that the rule of your country is, that a man must be down before six o'clock, or he may not go down at all?—Yes, and at some pits it is five o'clock.

2371. What is the set hour before which he may not come up?—The majority have it two o'clock, but in some cases it is thought that it is rather injurious that they should be compelled to stay down.

2372. Mr. *Liddell.*] Do I rightly understand that you wish to see the labour of the workman limited by law?—We are not come before the Committee to ask for a limitation of hours for the men, but for boys.

2373. Have all your answers on that subject had reference to boys, and to boys alone?—Yes.

2374. Mr. *Greenall.*] But I understood you to say very distinctly that you thought that the present scale of wages was too low?—Yes.

2375. You thought that a man working eight hours ought to obtain the same wages that he now gets for 12 hours?—Yes.

2376. Mr. *Powell.*] Do the hours of labour of the boys vary as much as the hours of labour of the men?—Yes, in our district they do; in some districts they do not.

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2377. Many boys then begin to come up at two o'clock?—Yes, in some cases, where they have done their work.

2378. And the work that they have to do depends upon the day's work of the men?—Yes.

2379. Mr. *Woods.*] I suppose that some men, being entirely free to work what hours they choose within wide limits, will occasionally make a very long day, either for the purpose of making up for a lost previous day, or for the purpose of having a greater holiday on the reckoning Monday?—Yes.

2380. In fact, they limit their own duration of hours, and so occasionally they make a very long day for their own pleasure?—Yes, sometimes.

2381. Mr. *Liddell.*] Are you of opinion that the question of wages and hours of work, as far as the men are concerned, should be left for settlement between the men and the masters?—Yes.

2382. *Chairman.*] Have you anything to say on the subject of weighing in your district; it is measurement, is it not, that is practised now?—Yes.

2383. And measurement is objected to by many of the miners, is it not?—Yes, the law is very unsatisfactory at present; it leaves the master open to make his choice as to measurement, and even for that measurement we have no real standard rule in the district. I do not hesitate to say (for I can prove it) that I can find tubs in the district which were 6 cwt., but have got to 6½ cwt. and to 6¾ cwt. They have increased them, and the men are not paid in proportion to the increased size, and we wish to have a law made that we shall get paid by weight, as the master sells by weight.

2384. Mr. *Powell.*] Do not the coals weigh much heavier when they are wet?—As a rule, they are not wet, but they do weigh heavier when they are wet.

2385. In a thoroughly wet mine would not the coal weigh more than in a dry mine?—Yes, it would.

2386. *Chairman.*] There is a general feeling among the men against the system of measuring, is there not?—Yes, there is a strong feeling amongst them on that point, and that strong feeling arises in this way: We have had so many disputes arising in cases where the men have had the stuff taken for them, that we placed a man on the pit bank to look after the thing, and the proprietors say that this man must be there simply to take an account, and not to speak; and in 15 days they took not less than 222 tubs from the men, and when there was a remonstrance they took and drove that man from the pit's bank, and cast him into prison.

2387. What colliery is this that you now speak of?—It is the Linsey pit, belonging to the Earl of Crawford's estate.

2388. After the man had been there a fortnight, he was driven off the pit's bank, as I understand you?—He was carried off, by the authority of the master, two or three days. They allowed him to be there 15 days, and he spoke and remonstrated with the banksman for taking those tubs unjustly from the men, and up to the 15th day he had not been interfered with. On the 16th day he was taken and carried off by the authority of the proprietors; and on the 17th, if I recollect right, a policeman was fetched; he was given in custody, and was imprisoned four hours, and then he was brought before the magistrate.

2389. On what charge?—On the charge of misconducting himself. When he was brought before the magistrate, they brought nothing against him.

2390. On the charge of misconducting himself! in what way was he brought before the magistrate?—Because he had spoken to the banksman.

2391. Under what Act of Parliament was that done?—"Such person so employed shall not be authorised in any way to impede or interrupt the working of the coal mine, colliery, or iron-stone mine, or to interfere with the weighing, measuring, or guaging, but shall only be authorised to take such account," and so on. That is the 29th Clause of the Mines Inspection Act.

2392. Then he was charged with interference?—Yes; his interference just amounted to remonstrating with the banksman, and saying that he ought not to take the tubs.

2393. No evidence was brought against him, you say?—No evidence was brought against him; he was dismissed.

2394. Had he been employed in the colliery before?—He had been employed; there was nothing against him; he was a steady workman.

2395. Was not it in the power of the master of the colliery to dismiss him if he chose; is it not required, not that he must be one who has been employed in the mine, but "one of the persons for the time being employed in such coal mine"?—He was so employed at the time when he was appointed by the men.

2396. I presume the master has the power, under that clause, of saying, "He is no longer in my employment, and therefore he can no longer be allowed to act for you;" at any rate the master did not use that power if he had it?—If the master has that power then I should say, what is the advantage of the law? the law has no effect.

2397. Have you known any other cases of difficulty arising?—Yes; we had them at many of the collieries.

2398. And you say that there is a general feeling of dissatisfaction among the working colliers as to the mode of measurement?—Yes; we wish to have the Imperial weights placed upon each pit's bank, as in South Yorkshire.

2399. And to have the pits subject to the inspection of the police?—Yes.

2400. Mr. *Woods.*] With regard to the case of these tubs which you know as having grown from six to six and a half and six and three-quarters cwts., in what time has that been done, do you suppose?—In some cases they have gone on for years.

2401. Has there been any re-arrangement of wages during that time?—Yes, there have been re-arrangements, but the general arrangement of prices has always gone upon the footing of the tub holding what the men have a knowledge of its holding; the master wants 6 cwt., or whatever it may be. In the case of a 6 cwt. tub, for instance, the masters say they want 6 cwt.

2402. I believe you said that in this case which you have referred to, of the man being driven off the bank, no evidence was taken before the justices?—No.

2403. Was that at the petty sessions at Wigan?—No, it was in the private court, in the Police Court.

2404. But no evidence was given, you say?—No.

2405. How

2405. How was he taken up; by summons, or how?—He was given in charge.

2406. And how was he liberated?—He was dismissed. Mr. Meek, the magistrate, dismissed the case, as there was no evidence against the man. The feeling is very strong indeed upon the weighing clause in the district. I have kept the men from many turmoils that they got into, expecting that we should get redress before this Committee. It is a very aggravating question. There are cases where men have had stuff taken from them because of the tubs not being 6 cwt., and that has been taken into the town of Wigan and sold; there has been 21 hundredweight sold in that way.

2407. *Chairman.*] Do I rightly understand you to say that in some sense it is regulated by weight; that the tub is supposed to contain six cwt., for instance?—Yes; the master generally makes a statement, "I want so much weight." Some of the masters I arrange with say that.

2408. But it is judged by the eye?—Yes, and in cases we have said that they wanted too much weight, and we have proved it by weighing it on a machine; it has been half a hundredweight, three-quarters of a hundredweight, and in some cases a hundredweight, over what they wanted.

2409. Mr. *Woods.*] That is to say, tubs have been weighed and found to contain on the day they were weighed more weight than by the original agreement the tubs should contain?—Yes.

2410. Mr. *Foster.*] How many pounds weight, according to the understanding between the colliery proprietors and the men, are the tubs to contain?—Twenty cwt. to the ton.

2411. Of 112 lbs. or of 120 lbs?—One hundred and twelve lbs.

2412. Mr. *Liddell.*] Are these matters connected with the weight of the tub and the amount of coal it should contain, made the subject of special rules?—If they are made the subject of special rules, yet whatever the measurement may be, the men suffer greatly. There is one man in authority perhaps over 400 men, and just as he thinks, judging by the eye, the measurement is reckoned, and he takes their stuff when he likes.

2413. The special rules are in all cases framed and submitted to the inspector of the district, are they not?—Yes.

2414. Have these special rules, which regulate this matter of the tubs, received the approval and sanction of the inspector of the district?—That rule is never submitted to the inspectors, they have nothing to do with that matter; in fact, it is not one of the special rules.

2415. But it is an arrangement between the workmen and the masters solely, and never comes under the cognisance of the inspector at all; is that so?—Yes.

2416. General *Dunne.*] I understand the objection made by the workmen to be, that the tubs are changed and give a larger amount of coal than they ought to do?—Yes.

2417. That, in fact, is a kind of fraud practised on the workmen?—Yes.

2418. You want to put a stop to that?—Yes.

2419. And you see no way to accomplish that but by weighing?—No.

2420. Could not there be a fraud in the weight as well as in the measurement?—Not if the weights were submitted to the inspector; that is what we want.

2421. It would satisfy the workmen if the inspector were able at any time to call for the weights and inspect them?—Yes; I am sure that the knowledge of the inspector having the power to pounce upon them at any time would keep them in the right position.

2422. Then you suggest an inspection similar to that of weights and measures in places where they sell commodities?—Yes.

Thursday, 19th April 1866.

MEMBERS PRESENT:

Mr. Ayrton.	Mr. Wm. Orme Foster.
Mr. Bruce.	Mr. Kinnaird.
Mr. Clive.	Mr. Liddell.
General Dunne.	Mr. Neate.
Mr. Fawcett.	Mr. Hussey Vivian.
Mr. Ferrand.	Mr. Woods.

CHARLES NEATE, Esq., in the Chair.

Mr. James Ackersley, called in; and Examined.

Mr. *J. Ackersley.*

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2423. *Chairman.*] What are you?—A Collier.

2424. A working collier?—Yes.

2425. In what mine?—The Doe.

2426. Where is that?—At Kearsley.

2427. What district is that in?—In the county of Lancashire, between Bolton and Manchester, three and three quarters miles from Bolton, and seven and a quarter miles from Manchester.

2428. How long have you been working in the pit?—About 32 years.

2429. Did you begin your work in that same pit where you now are?—No; I have not worked in the same pit where I am now very long.

2430. How long have you worked in that pit?—Some three or four months.

2431. Where did you begin working?—At a place called Kearsley Hall.

2432. Still in the same district as the pit where you are now?—Yes.

2433. How old were you when you first went down the pit?—About nine years of age.

2434. And you have been a working collier ever since, have you?—Yes.

2435. How long were you in the mine where you were before you came into the mine where you are now?—About two years.

2436. Were there many boys employed in that mine?—Yes.

2437. What is the number of men employed in the mine where you are now?—About 80, I should say; from 80 to 90.

2438. And how many boys are there?—I cannot say exactly; perhaps 20: that is generally about the proportion.

2439. Mr. *Woods.*] Who is the owner of the colliery?—Mr. Sommers Scowcroft.

2440. *Chairman.*] What was the mine where you worked before you came to the mine where you work now?—It was the same mine, but a different pit.

2441. And under what master were you?—The trustees of the late Mr. Fletcher.

2442. How many men were employed there?—From 190 to 200.

2443. And how many boys?—Forty to 50; I cannot say exactly.

2444. Have you made observations upon the ages of the boys?—Yes; I have taken notice of that subject.

2445. At the pit where you are now, you say there are about 20 boys?—Yes.

2446. Are there any of them under 12 years of age?—I think none under 12 years of age at the pit where I am now.

2447. Have you noticed any difference in that respect since the passing of the Act of 1860?—Yes; things have been better in regard to the boys since that Act.

2448. As far as your observation goes, that Act has been complied with?—Yes, in a general sense.

2449. I mean speaking more especially of the pit where you are now working?—Yes.

2450. How was it at the pit where you were before?—About the same.

2451. You mean that the age at which the boys were employed increased since the passing of the Act?—Yes.

2452. Did you hear of boys being called upon to produce a certificate?—Yes; in both places that is observed.

2453. So far as you observe, the requisitions of the Act as to age and certificate have been complied with in both places?—Yes.

2454. What time do boys go down into the pit where you are now?—They commence going in at half-past five in the morning.

2455. Do they go down at the same time as the men, or after?—At the same time.

2456. Do they come up at the same time?—Yes; there are some that come up a little after the men, when the men leave it to the drawers to fill the tubs.

2457. How long do the men work?—They reckon to work 12 hours.

2458. And the boys stay down the same time, excepting that sometimes they remain later than the men?—Yes; the rule is that the banksmen commence winding coal at six o'clock; then the drawers must be at work, and they leave off at half-past five at night; that is the rule in both places.

2459. What do you mean by "rule"?—It is the understanding of the masters. The banksman

man on the pit commences winding coal at six o'clock in the morning, and they reckon to stop winding at half-past five at night.

2460. What time is allowed for meals for boys?—At eight o'clock in the morning the engine stands a quarter of an hour, and at twelve o'clock the engine stands half an hour.

2461. You mean the winding engine?—Yes; they stop winding coals while the banksmen and day men, and so on, get their meals.

2462. What schools are there about there?—In Kearsley and Farnworth there are about nine or ten schools of different denominations.

2463. Do the boys attend these schools at all?—Yes; all those in the two places I am speaking of who are under the age specified in the Act attend the schools in that district.

2464. You means boys under the age of 12?—Yes.

2465. Do they learn much when they go there, do you think?—Yes; they learn pretty fairly. In Kearsley we have a pretty good schoolmaster, who is very attentive to the children.

2466. How far is the pit's mouth from the school?—A quarter of a mile.

2467. When you speak of the district where the nine or ten schools are, how large is that district?—Two miles across in one direction, and nearly the same distance the other way.

2468. In that extent there are nine or ten day schools, are there?—Yes; eight or nine or ten.

2469. How are those schools maintained?—As far as I know, the national schools are maintained by subscription and the nation together; and the other schools, which are sectarian, are maintained from their own sources, and the sums that those who attend the schools pay.

2470. What is the payment to those schools for boys?—We have different amounts, according to the stage of education they are in; from 2*d.* up to 1*s.* per week.

2471. Some of the boys pay as much as 1*s.* a-week, do they?—Yes.

2472. Mr. *Liddell.*] Do the boys remain down the pit the same number of hours precisely as men?—Yes; the boys have to be longer, if there is anything for them to do.

2473. Then what is the longest time that any of these boys remain down the pit?—12 hours.

2474. Never longer than that?—No; except there is something to do with the engine, so that they cannot come up.

2475. What is the average number of hours that the men stay down?—10 to 12. It is generally the custom of the men that when they have filled the last of their coal they come up, and the boy has to stop and see it out of the pit

2476. The boys bear a proportion, I think I understood you to say, of from one-fourth to one-fifth of the number of the men in any pit?—Yes; something like that.

2477. You used the expression that the time for which the boys are employed is the subject of a rule or an understanding; is that an understanding between the masters and the men, or is it a written rule forming a special rule of that pit?—It is an understanding between the masters and the men; it is on account of the day-men at the top; they commence working at six o'clock in the morning the same as all other day-men, and they reckon to have done their work and to be at liberty to go at half-past five.

2478. Then that forms one of the conditions of the contract between the master and man?—Yes.

2479. I presume that there is a deduction made from your pay for the expenses of schooling?—No, we have to pay the schooling ourselves.

2480. In the shape of children's pence?—Yes.

2481. Then, if I understand you rightly, there is no deduction from wages on account of schools?—No, there is not.

2482. General *Dunne.*] The sending of the children to schools is optional, is it not?—No.

2483. You say that it is compulsory, then?—In the places where I worked, if they are under the age of 12 years, they have to go four hours a week.

2484. That is required by the Act?—Yes.

2485. You have to pay for that schooling?—Yes.

2486. Do the colliers complain of that?—No, I do not think they complain of the payment; I think a large portion of them would rather have more schooling than there is.

2487. How many hours' schooling in the week do the boys get?—Up to 12 years of age they get four hours.

2488. Four hours in the week, do you mean?—Yes, two days of two hours a day.

2489. What days?—Any two days in the week when the schools are going on.

2490. Do the boys work previously to that schooling on those two days?—Yes.

2491. How many hours?—They generally work about six hours, so as to be away in time.

2492. Do you consider them so fatigued that they are not fit, after that labour, to go to school?—Not after six hours, but after ten hours they are too fatigued.

2493. Mr. *Clive.*] You have been a long time an operative miner, you say?—Yes, 32 years.

2494. Are you now a proprietor?—No.

2495. Have you ever been a small proprietor?—No.

2496. Have you any share in a colliery?—No.

2497. Have you observed these boys closely after they have worked six hours, when they have come from the mine?—Yes.

2498. Are they pretty lively then?—Not over lively.

2499. When does fatigue begin to show itself; after six hours or 10?—It shows itself after six hours.

2500. Is it your opinion that they should not work any hours at all on the days when they go to school?—If they were less worked on the other days they would be more lively, and would not be so fatigued, but the extra work on the other days make them less refreshed on the days when they go to school.

2501. Have you any children yourself?—Yes.

2502. How many?—Five.

2503. Are they boys?—Yes.

2504. How old is the eldest?—The eldest of mine is married, and the youngest is 13.

2505. Is he in the pit?—Yes; that is the youngest I have working.

2506. Has he been at school?—Yes.

2507. Is he a pretty good scholar?—Not over well.

2508. What school does he go to?—The Kearsley National School.

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2509. Do you often observe traces of fatigue in him?—Yes.

2510. After the long hours of work?—Yes. It is the general custom with the boys when they come home, as soon as they get something to eat, to lie down before they wash themselves and go to sleep, they are so fatigued.

2511. After six hours or twelve hours' work, do you mean?—Twelve.

2512. What number of hours do you think boys of that age should work?—They ought not to work above eight hours a day, in my idea, before they are 12 years of age.

2513. But you advise their not being allowed to work at all till they are 12?—Yes, I would strongly recommend it; it is very necessary, in my opinion.

2514. You think that no boy should go under ground until he is 12 years old?—I think that ought to be the rule.

2515. Is that the opinion of the bulk of the working miners, both of those who have children and those who have not?—It is the opinion of the general bulk. There are some men who would not care what came of their children, so as they make something out of them.

2516. Mr. *Ayrton.*] Have you had much opportunity of observing the children that have gone into the mines since the Act of 1860 was passed?—Yes.

2517. And the children that went in, in the first year of the Act of 1860, are now about from 16 to 18 years old; they are now lads?—Yes.

2518. Those who went in at 11 years of age would be now 17, and at 12 years of age, 18; they are now lads?—Yes.

2519. Have you had much opportunity of observing them, so as to know what the state of their education is?—The young men with us are better educated and better regulated in their habits than they were previously. I refer to those who are growing up now into young men.

2520. Do you find that they have kept up the education that they had at school, or that they have improved themselves generally?—In some cases, but not in all. In some cases, when they get a start, they feel a desire to get more education, but those who have not had an opportunity to get much, but only what they have been forced to get, do not feel the same desire to get more, on account of knowing little, through only having gone to the school four hours a week.

2521. They do not pursue their education, in fact?—No, not after the law permits them to stay away.

2522. Did your children go in before or after 12 years of age?—At 10.

2523. Is it your opinion that they did not get a sufficient amount of education between 10 and 12, whilst working and going to school also?—Yes, I am certain that they have not had the proper amount of education which they ought to have had.

2524. Do you think that the young men grow up very callous about their conduct in the mines, in consequence of their going in so young?—Yes, and in consequence of not having a proper education.

2525. Do you think that if the children went in a little older, and with more education, they would be more careful in their conduct underground?—Yes.

2526. Do you think that would tend to prevent accidents?—I think it would tend to prevent accidents in a great measure, though there are other things that cause accidents more than that, but their conduct would be better.

2527. Do you think that the accidents are to be attributed, to some extent, to the callousness and indifference of the men in the mines?—The accidents are not much attributable to that.

2528. To some extent, are they?—I cannot say that they are to any extent attributable to that. It is merely their acts one to the other, and their not treating each other well, that I speak of.

2529. In your district is there much tendency on the part of the men to drink?—There is not any more on the part of the coal miner that I am aware of than on the part of any other trade.

2530. Do the other trades in your district require the children to be turned to account at a very early age?—At a very early age there is no other employment but the mills, and that is regulated by law in the case of the children going to work.

2531. But infant labour is very much in demand in your district?—Yes.

2532. Is there a great disposition on the part of the mining population to spend their evenings in public-houses in your district?—It is not more so with the miners than with any others. I do not know that there is any difference in that.

2533. Then on the part of the whole set, miners and non-miners, is there such a disposition?—There are some that will go to the alehouse and spend their evenings, and others that find out more harmless places.

2534. Are you able to say whether there is any difference as to the mode in which the working people in your district spend their evenings, comparing those who can read and write with those who cannot?—Yes; those who are not educated spend their evenings in a more rude and uncultivated sort of way than those who are educated.

2535. Do you think that is the right general description comparing the two classes, those who can read and write and those who cannot?—I do not say that it applies to every man; there are some of the non-educated that conduct themselves with propriety, and some of the educated do not.

2536. But you think that generally those who are not able to read and write spend their evenings, to a considerable extent, more than the others in the public-houses, and in other modes of sensual indulgence?—Yes.

2537. Mr. *Clive.*] You stated that you thought the boys ought not to go underground at all till they are 12 years of age; have you any apprehension that that rule would make men send boys to other trades?—I do not suppose that they would in many cases; they might in some. The coal miners generally like to have their own children going to their own trade as other branches of trade do. As mechanics or wheelwrights, and so on, look to the children going to their trades, so does the coal miner. He takes his child in generally so as to have him under his own protection.

2538. And also that he may have his earnings?—Yes.

2539. Mr. *Ferrand.*] According to your statement the men work 11¼ hours a day in the coal pits?—Yes.

2540. Do they object to work that length of time?—No, not the men.

2541. It

2541. It is about the boys you make that objection?—Yes.

2542. What is the average wage earned by men who work for that period?—From 3 *s.* to 4 *s.* a day.

2543. That would be a guinea a week?—Yes, or a little over, or it may be lower.

2544. Do the boys, on the day when they do not go to school, work 11¼ hours too?—Yes; they are down 12 hours.

2545. But they are at dinner and breakfast three-quarters of an hour?—Yes.

2546. That makes the period 11¼ hours a day for boys 12 years of age to work in the pit?—Yes.

2547. Do the boys who are 12 years of age work in the pits 11¼ hours a day on every day, when they do not go to school?—Yes.

2548. Does the stoppage of the engine make any difference in that period of time?—In some cases. Those that are in the bottom of the pit, and are far away from the shaft, do not know the time that the engine is stopped, and consequently they have to take their meals as they can catch them, and eat them as they are going.

2549. Mr. *Ayrton.*] You mean as they are working?—Yes, they take a piece of their meat in their hand and eat it as they are working, as they are going with the waggons.

2550. Mr. *Ferrand.*] If the majority of the colliers object to the boys working in the pits under 12 years of age, why do they allow them to work?—It is from pecuniary motives that they allow them to work, I suppose.

2551. Although a majority of the colliers object to their children working in the pits under 12 years of age, still they allow them to do so on account of their wages?—Yes, at the same time they think that it is not right for the boys to work at that age.

2552. You have been asked several questions as to the number of colliers who drink in the evenings, and you were asked whether the educated or uneducated drank the most. Now, among the colliers, which do you consider to be the largest number, the educated or the uneducated; are the colliers, as a body, in numbers larger who have received an education than those who have not?—Taking the old and the young together, the uneducated will be as many as the educated; but the young men of the rising generation, who have been forced to go to school in these late years, are rather improved upon the old, from the fact of their having been to school.

2553. Mr. *Bruce.*] How is the law observed in your colliery with respect to the employment of children; are any employed under 10 years of age?—No, not in my colliery.

2554. Are any precautions taken to ascertain their age?—Yes.

2555. By whom?—By the manager.

2556. Does he see personally every boy who applies for work?—Yes.

2557. How is it as to children between 10 and 12; is any care taken to see the law observed as to their education?—They demand a certificate from the boy to certify that he has been at school once in a month.

2558. That is done regularly, is it?—Yes, at the mine where I am.

2559. You said you employed your own boys between 10 and 12, although you have before stated that you think they ought not to be employed; how is it that you employ your own children in that way, if you think they ought not to be so employed?—I believe that many cases are cases of necessity; the miners are better in their circumstances now than they have been in years gone by.

2560. The same necessity does not exist at this moment, you say?—Scarcely.

2561. Still men do it now?—Not so much as they have done.

2562. Do you know many parents, working colliers, who refuse to allow their children to be employed before they are 12 years of age?—I do not know any parents who refuse to allow their children to be employed before 12, but they do not take them quite so soon as they did.

2563. Do you think that if a law were passed preventing the employment of boys in mines before they were 12 years old, they would go to school, or that they would go to other work?—I think that the greater proportion of them would be at school.

2564. The parents at present yield to the temptation of the increased comforts which they get from their children's wages?—Yes, in many cases.

2565. Would not the temptation exist equally to get them employed in factories, if they were not allowed in mines?—The fact would be this,—the time that the boys would be allowed to work in the mills would bring so little in, that the parents would keep them at school, I think, rather than send them to the mills.

2566. Are the wages to be earned in factories lower than the wages to be earned in the collieries?—In that period of time a boy in the mill would only be working half time, and would perhaps receive from 1 *s.* to 1 *s.* 6 *d.* per week if he was working in the mill.

2567. Is that the whole payment he would receive?—That is the whole payment he would receive; he would only be allowed to work half time, and in that period of his life he would not get more than from 1 *s.* 6 *d.* to 2 *s.* per week.

2568. Have you known any cases of boys employed in factories up to 12 years of age taking to colliery work afterwards?—I have known cases where they have been employed up to 17, and then have taken to colliery work.

2569. Are those cases frequent?—Yes.

2570. And have they turned out good colliers?—Not generally in the case of those getting so old as 17.

2571. At what age do you think a lad ought to begin working under ground, in order to become a good collier?—About 12.

2572. Have you stated it as your opinion, that after the age of 12 any limit should be put on the number of hours the boys should work?—I think that from that age to 14 or 15 they should not work more than eight hours in the day.

2573. After 15, do you think that they should work the same time as grown men?—If I had it to settle I might allow them to do so, but not before that age.

2574. *Chairman.*] What is the work the boys do chiefly in the mine?—Drawing we call it; taking the coal away from the men.

2575. Do they draw it themselves?—Yes.

2576. Do not they use ponies in the mines?—Some of them.

2577. What are the days in the week that they only have six hours' work?—It is optional with them what days they take, but they are forced to go two days to school.

2578. As a matter of fact, they do take two days?

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days?—Yes; and the miner makes it his object to have as little work that the boy should do left undone as he can manage.

2579. On the days that they work shorter hours, do they do more work in the hour?—Sometimes; generally so.

2580. Supposing that the boys only worked eight hours a day, could the man go on working 12 hours?—Yes.

2581. But would not it lead to an accumulation of coal in the working; would the coal that the men cut in one day of 12 hours be carried away by the same number of boys in eight hours?—Not under the present system; but the men could take it away themselves after the boys had performed their quantity of work.

2582. Then, if you shortened the hours of the boys, the men would have to do some of the work that the boys do now?—Yes.

2583. You said something about what the education of boys in their position should be; what is your idea of what should be taught?—Reading, writing, and arithmetic, I should say.

2584. You do not go beyond that?—No; if they get that in general they will do for the positions they have to fill.

2585. Mr. *Liddell.*] If the men were required to draw their own coal one of two things must happen, either they would hew less, or they must work longer; must not that be so?—Yes, of course, in the case of those who have as much as they can do in the time.

2586. I am correct, am I, in supposing that if the men were required to do any portion of the work that the boys now do, they must either work longer or earn less?—Yes.

2587. Mr. *Fawcett.*] Do you think there would be any practical difficulties in introducing, in reference to the employment of boys in coal mines, a system of half time, similar to that which exists in factories, so that boys under 12, for instance, should be employed only half the time?—Yes; I think there would be difficulties.

2588. In what way?—It is a different way that the miner and the boy have to account for their wages from what it is for other trades; they are not paid generally with us by the day, but they are paid by the piece, and the consequence of the boys being out would cause a great difficulty as to the way in which they would have to divide their wages.

2589. Could not you make your arrangements to suit a law like that which applies to factories, if it were passed?—I do not think so.

2590. You do not think that the boys, if restrictions were placed upon their being employed in mines at all before 12, would go and work in factories?—No.

2591. If, as you say, the rate of remuneration for labour is so very small in factories as compared with coal mines that it would not be worth while to send a boy to be employed in a factory, how is it that some of the factory operatives do not send their boys to get the larger wages that they would get in coal mines?—The reason is that miners are not willing to take a factory operative's child, knowing that when the time comes for the boy to go into the mill and get more money, the parents will take him away; and after miners have instructed a boy to do a portion of the work well, they do not like to have him taken away and to have had their trouble for nothing.

2592. Mr. *Ayrton.*] Is there a general disposition on the part of the mining and factory populations to keep their children to their own business?—In a great measure.

2593. Mr. *Bruce.*] What wages did your boy earn between 10 and 12?—Perhaps 4*s.* or 5*s.* a week, or from 3*s.* to 4*s.* per week.

2594. Is that the rate now?—It is rather over that now; it would be, rather, 4*s.* 6*d.*

2595. What is the present rate of wages of boys between 10 and 12?—The boys are paid by the piece as well as the men in our district; according to the age of the boy, he takes up a certain portion of wages. A boy above 10 years of age, and up to 15, is called a quarter of a man; then he is called half a man from 15 to 17; and from 17 to 19, and in some cases 20, he is called three-quarters of a man.

2596. But do you mean to say that no rise of wages takes place between the ages of 10 and 15?—Only in the way of the difference that the wages earned in the pit make to the miner in general.

2597. You mean that if by the assistance of a boy the collier who employs him earns more wages, the payment made on account of the boy rises with the increased earnings of the collier?—Yes.

2598. Is that the usual mode of payment in your district?—Yes.

2599. Mr. *Foster.*] By whom are the boys immediately employed, the collier or the owner of the mine?—The collier, and with the owner's consent.

2600. Mr. *Liddell.*] Are you satisfied with that classification, or do you make a complaint against that system by which the boy receives a proportion of the wages of the man?—We are satisfied in our district with that.

2601. Mr. *Woods.*] Is it the rule in your country that a large proportion of the boys are the children or the near relatives of the colliers?—Yes.

2602. Then the boys may be correctly described as to the rate of their wages, as being very much under the influence of their own employers, seeing that they are chiefly their children or near kinsfolk?—Yes.

2603. You described the wages in the factories as being 1*s.* 6*d.* a week for short time; can you name a factory in your neighbourhood which pays only 1*s.* 6*d.* a week to short time hands?—Yes; Mr. Gee's.

2604. Is that within your own knowledge?—Yes, I have heard the spinners say that they are paid there 1*s.* 6*d.* a week for short time.

2605. At what age?—At the time that they are first allowed to go to the mill to work short time; I do not exactly know what that age is.

2606. But no relatives or connections of your own have brought home that small sum?—No, I would not have any there.

2607. You spoke of the time for which the winding engine stopped. Has the owner of the colliery any practical control over the meal times of the colliers and the drawers, who are their boys?—The owners do not reckon to interfere with us as to the meal times, but they expect that the colliers will not let the engine stand. They go down and find fault with the manager if the engine stands.

2608. It does not necessarily follow that because the engine only stands a quarter of an hour each collier only has a quarter of an hour for his dinner?

dinner?—No; sometimes they have more, and sometimes they do not get even that.

2609. Mr. *Foster.*] It is optional with the collier whether he gets the greater or the lesser amount of time, is it not?—Not in all cases; when the hook boy goes to the place where he gets his empty waggon, he turns, and when it is his turn to take the waggon, he has to take it, or he is getting behind hand with his work.

2610. Mr. *Woods.*] Supposing there were 100 colliers in your coal pit, cannot you conceive of an arrangement by which every drawer should have full time to have his dinner without the engine stopping?— No, not in the Kearsley pit.

2611. Is it a correct description of a coal mine to say that the workings generally are so arranged that the mine inclines down brow towards the shaft?—No, the general working is on the level.

2612. When a collier works the coal, and it is drawn away from him to the pit or to the station where the horse is, or to the incline engine, is it not generally the case that it leads down brow? —The main bulk of the work is on the level.

2613. Is it not the case that when the coal leaves the collier the drawer takes it down brow? —At the commencement, till he gets to the level, it is down brow generally.

2614. General *Dunne.*] You say that the boys are engaged for 11½ hours, or whatever time the collier is engaged?—Yes.

2615. Is that calculating it from the time when the boy leaves home till the time when he gets back?—The time he goes down the pit till he comes up. He has to go down at six o'clock, and is not permitted to come up till half-past five.

2616. Therefore he has considerably more time engaged, taking the time when he goes from his home till he returns and has washed and dressed himself?—Yes.

2617. How much more time is he entirely occupied in the day?—If they go down one of the last they get up early; it will not be much sometimes, but in some cases it will be 13 hours.

2618. In a day of that kind he could not do much else?—No.

2619. Do you think it would be possible to have relays of boys the same day, so that they should work half the time they do, and be succeeded by other boys?—I do not think it would work satisfactorily in the pit; in some parts of the works they are forwarder with the work than they are in others.

2620. How do you propose to get rid of the difficulty which has been mentioned?—I would prohibit a boy going above eight hours entirely if I had my way.

2621. Then you would throw it entirely on the collier to do the extra work?—Yes.

2622. You consider that the time the boy will be engaged in drawing is practically nearer 13 hours than 12?—Yes.

2623. Mr. *Clive.*] I understood you to say that there has been a great improvement in the Kearsley district as to the employment of children under 12 years of age?—Yes.

2624. Is that due to the law of 1860?—To the law of 1860 a portion of it, and to the advance of things in general; those who have become better educated through the law of 1860 see better the advantages of it.

2625. Do you think that if no further legislation were to take place, the advance of education would lead the colliers to keep their boys out of the pit till that age?—I think it would take a long time for the advance of education to do all that.

2626. You think that they must be compelled by law?—Yes, or it would be a long time before that was brought about.

2627. Mr. *Ferrand.*] Are the colliers, as a mass, anxious for a further law?—Yes.

2628. You have named one mill in which you state that the wages of children working half time were only from 1 *s.* to 1 *s.* 6 *d.* per week?—Yes.

2629. Are there any other mills in the neighbourhood?—Yes.

2630. Do you mean to say that the children are only earning from 1 *s.* to 1 *s.* 6 *d.* in those mills?—From the time they commence half time to the time they commence full time, those who earn the most do not get, from what I can guess, above 2 *s.* 6 *d.* a week.

2631. You have now gone from 1 *s.* and 1 *s.* 6 *d.* to 2 *s.* 6 *d.*; which do you mean it to be?—Those wages are from 1 *s.* 6 *d.* to 2 *s.* 6 *d.*

2632. At what age do the coal boys begin to keep their own wages from their parents?—I cannot tell that when it happens in the case of some one else.

2633. Are there no boys in your colliery who are allowed by their parents, after a certain age, to pay their expenses as lodgers, and then keep their wages?—I am not aware that they do that.

2634. At what age are the coal boys considered to become men, and to keep their own wages?—They are considered to be men with us at 20, or from 19 to 20.

2635. Then at 19 years of age the boys, or young men, as you choose to call them, can keep their own wages?—Not in all cases; the general rule is that they work with their parents, that the money is drawn in a lump for the father's and son's wages; and in those instances where they are not the sons of the miners they work with, they generally draw their wages from the miner whom they work with.

2636. Mr. *Foster.*] What do they do with the money, then?—They take it to their own parents, as far as I know.

2637. Mr. *Ferrand.*] At 19 years of age would a young man, if living with his parents, pay them so much for lodging with them, or would he hand over the whole of his wages to them?— He would hand over the whole to the parents, as a general rule.

2638. Then do the parents allow them any portion of those wages?—They generally give them something for expenses when they are out.

2639. Do you know much of the factory population in your own neighbourhood?—There is only that mill on Kearsley Hall, near the place where I live.

2640. At what age are the young people in this factory considered to be their own masters? —I cannot say that.

2641. General *Dunne.*] Do you think that the health of the boys is injured through so much work as they now have?—It is partly from that, and partly from bad ventilation that their health is not good.

2642. I only wish to know whether you think that, as a fact, their health is not as good as that of the ordinary population?—I do not think it is.

2643. Do you think that it affects them in after life, and shortens their lives?—Yes.

2644. Mr. *Fawcett.*] You said, did you not, in

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reply to a former question of mine, that after 12 years of age a boy gets more wages in a factory than in a mine?—I think I did not say that.

2645. When I asked you why factory operatives did not send their children to the mines, did not you say that the miners were not willing to take them, because when they were 12 years old, if they were not compelled to work in the mines they would immediately go back to the mills, where they could earn more than in the mines?—I am not aware that that was my answer.

2646. Mr. *Woods.*] The honourable Member for Northumberland asked some questions as to what would be the result if the boys had their hours of labour restricted; with reference to that subject, could full-grown men, in the case of the thin mines in the Wigan coal field, do drawers' work?—I do not know; I never was down there.

2647. Could full-grown men do drawers' work in your neighbourhood?—Yes.

2648. Is it within your own knowledge, and do you mean to say that a full-grown man can do drawers' work in thin mines?—There are not many thin mines yet with us.

2649. What is the depth of a thin mine?—Below a yard.

2650. Can full-grown men do drawers' work in a yard?—Yes.

2651. Can they do it with the same facility that a drawer can do it?—Scarcely.

2652. Do you think, as a matter of opinion, that full-grown men can do drawers' work in the thin mines?—I do not think they can.

3653. A good deal has been said about the relative wages in cotton factories, and in coal mines, and you have defined the age at which in your country a drawer is rated as quarter of a man; what is the amount a week that you assume those drawers to be earning?—About 4*s.* to 4*s.* 6*d.*

2654. Then at 15 years of age you have rated a drawer at half a man?—Yes.

2655. What are his wages then?—From 8*s.* to 9*s.* per week.

2656. Then from 15 years to 17 years of age, according to you, he is gaining then from 8*s.* or 9*s.* a-week; 17 to 19 or 20 he is taken as three-quarters of a man, you say; what will be his wages then?—Thirteen shillings to 13*s.* 6*d.* a week.

2657. *Chairman.*] Are there many women employed at the pit's mouth where you are working?—I am thankful to say that we have none of that.

2658. Neither girls nor women?—Neither girls nor women.

2659. Is that the regulation of the mine?—I think it is that the masters are indignant at the idea of having a woman to do a man's work.

2660. Are you speaking now of the colliery where you are now at work, and of the colliery where you were before?—There are none employed in the Kearsley and Farnworth district, and for some miles there are none.

2661. That is because the masters do not desire it; not from any opposition of the men to it?—That is so.

2662. What becomes of the women there?—They go into the mills.

2663. Then there is great facility in that district, is there, for women to go into the mills?—Yes.

2664. What is the depth of the mines in which you have been working?—I think the deepest will be some 300 yards in Kearsley, and from that to 150 yards.

2665. Have you anything to say about the means of ventilation; are you satisfied with them?—I am sorry to say that the ventilation is not as good as it might be.

2666. Are you speaking of the mine where you are working now, or of the one where you have been previously?—Of both.

2667. Is it that there is not a sufficient draught of air, or that it is not carried sufficiently through all the workings of the mine?—It is not carried sufficiently through all the workings of the mine.

2668. How far off from the current of the air have you ever to work in that mine; how far beyond the regular air course?—Different lengths; sometimes up to 20 and 30, and nearly 40 yards.

2669. Is the air carried up to the working place by a braddice, then?—In some instances.

2670. How far is it carried by a braddice?—Just as far as the men can work safely; till they think he will be out of dangers or difficulties which may cause an explosion.

2671. How far is that thought to be in practice in the mines where you work?—In some places they have more gas than in others, and, therefore, the distance varies. The general distance, I understand, to be some two or three yards (not more than that) that it should be beyond the place where the man is.

2672. Have you known any accidents in the mines in which you have worked from want of ventilation?—Yes.

2673. Are the mines in this district very liable to explosion?—Not so much as some; but they have their share of gas, and rather more than many others.

2674. When was the last accident in this district in any mine where you have been working?—There has not been an explosion where I have been working since some six or seven years ago.

2675. There has been no explosion within the last six or seven years within your knowledge arising from want of ventilation?—Not where I have been.

2676. What lamps do you use?—The Davy lamp.

2677. Is the use of that regularly enforced?—Yes; in the last place where I worked I was obliged to work with it regularly.

2678. Is not that so where you are now?—No; we are only required to take one into the place to see that there is no gas in the morning. In the last place where I worked I was forced regularly to take it.

2679. Who goes down to see whether there is any danger?—The fireman goes, and leaves a signal at the entrance of the place, so that we understand that he has been there to examine it.

2680. How long a time before you go there is it that the fireman has been there?—About half an hour.

2681. In every case not more than half an hour?—In every case, in the pit where I am now employed.

2682. The fireman in every case has been there half an hour before the miner comes, you say?—Yes; the fireman goes down at five o'clock, and the men commence going down at half-past; he is that much in advance of them.

2683. But how long does it take for a fireman

to

to visit the workings?—He will go through them by the time the men commence going down; by half-past five or by six o'clock he will have completed his round.

2684. It is not an extensive pit?—Not as extensive as some. There are four firemen in the pit where I am, I think.

2685. Have you anything to suggest as to the defective ventilation in your mine?—That the air courses should be made better and larger, and that a bigger current of air should be turned through them, that would carry away all the gases.

2686. The current of air is not sufficient, you think?—The current of air is not sufficient.

2687. Are proper pains taken to stop the cross cuttings in your mine?—At the place where I am now they do not use any brickwork; but at the last place where I was they make all the stoppings with brick and mortar.

2688. How do they do it where you are now?—They stop it up with dirt.

2689. Have you ever known brickwork blown out by falls of earth inside that working?—Yes.

2690. How do you account for that?—When anything like that occurs it is when there is a vast fall all at once, what the collier generally terms a land weight, and the workings have been standing finished, as it were, without any place in the workings being opened, and then it comes with one crash.

2691. That cannot be guarded against, can it?—By a proper strength of stopping being made it can be guarded against. The stopping might be made strong enough to stand that. The stoppings are generally made out with one brick thick, 4½ inches.

2692. Mr. *Bruce.*] What means do you suggest for securing better ventilation?—To make better air courses, and to conduct the air through all the places that are and have been in work where the men can go to.

2693. But they are bound by the Act already to afford proper ventilation, are they not?—Yes.

2694. What more can the Legislature do?—They can force them to keep a proper quantity of air going through. I do not see that they can do anything else, but they could force them to keep a proper size of air course, and the pits at proper distances.

2695. Do you think that all the pits should be under constant examination by the Government, in order to see that the rules are observed?—I think that the Government inspector should go once in every month to see that they are safe.

2696. Has there been any complaint in your colliery to the inspector of insufficient ventilation?—He has made complaints himself, and found faults, I understand.

2697. And were the faults which he pointed out remedied?—Yes, to a certain extent.

2698. What more could he do?—It could have been done so that proper ventilation of the pit should be continued.

2699. Do you think, then, that the inspector ought to take into his own hand the management of a colliery?—No.

2700. Then, where will you draw the line; you say that he visited the colliery and found fault with it, and that the faults were at any rate partially remedied; what more could be done by him without his taking the colliery into his own hands?—If he had not so much work to do he could visit the collieries oftener, and the managers, if they knew that he was coming oftener, would see that the thing was done.

2701. Mr. *Liddell.*] You have been speaking of the distance that men work beyond braddices, and I understand you to say that they work as far as they can work with safety?—Yes, as far as they consider to be safe.

2702. Who is the judge of that?—The manager or fireman.

2703. Supposing that on your arriving at your place in the morning, in your opinion the ventilation was less good than it had been the morning before, what would you do?—If I could work in it, sooner than go out I should work in it; that is to say, if I considered I could do so without running the risk of coming to injury.

2704. But supposing that it was in such a condition that you thought it was not safe, what would you do then?—I should send for the fireman and show him that it was in such a condition that I durst not go in.

2705. Do you know of any cases where it had got to such a state that you had to send for the fireman?—Yes, I have had within three weeks to send for the fireman.

2706. What did he do then?—He put up the braddice.

2707. Then the evil was remedied at once, was it?—Yes.

2708. And you have no complaint to make of any fireman in your knowledge having neglected the warning that you had given him?—No.

2709. You have said, have you not, that the fireman goes down at five o'clock, and completes his visits in all cases by half-past five?—Or a quarter to six.

2710. Then the amount of work that the fireman has to do is nicely adjusted, I presume, so that he may be able to do it in that time?—Yes, the workings are not so large there as in some cases.

2711. Have you heard of any complaints against the firemen for not visiting the mines?—No.

2712. Then you are perfectly satisfied, are you, that the fireman does his duty in all cases?—No, if he had done his duty I should not have had to send for him.

2713. In that particular instance, was the ventilation so bad that, had he visited the place, he must have discovered it for himself?—Yes.

2714. Then he had not visited it that particular morning?—No.

2715. Was any notice taken of it by the master?—No; the fireman told me that he had not been.

2716. Did you complain to the master of his having neglected his duty to that extent?—No.

2717. Why did you not?—The reason is, that masters do not like men to complain, because they consider that the men are meddling with the underlookers' and firemen's work; neither does the manager, the underlooker, or the firemen like it.

2718. Do you mean to say, that if a workman complained of a man in the responsible position of a fireman having neglected to attend a portion of the mine that he ought to have visited, that complaint would not be attended to, and the fireman would not be punished?—I do not think in that case he would have been, because he

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himself warned me that he had not been in the place.

2719. Mr. *Foster.*] All you have to suggest on the subject of ventilation is, is it not, that there should be a larger number of inspectors?—A larger number of inspectors, and that there should be a better air course kept, and the air not conducted so far as it is in some cases.

2720. Those are matters of detail; you have nothing else to suggest on the subject of ventilation but a larger number of inspectors?—A larger number of inspectors.

2721. Mr. *Vivian.*] How are the works in these pits conducted; by long wall or by stall and pillar?—The level works are generally one above the other, say, 15 yards; the up brow work is cut from the one to the other.

2722. Is the coal worked away by long walls or stall and pillar?—They leave pillars there.

2723. And they work off the pillars afterwards?—Yes.

2724. When you say that you work 20 yards before the air, do you mean that that is in driving out the main ways and headings, or that it is in work in the stoppings?—It is in driving the up brows; it is in the narrow work; the deficiency of the air is there.

2725. That is the communication between the two main ways, which are afterwards stowed?—No, they make stoppings; they do not stow them. When they come back they use them for their work again to fetch the coals through.

2726. Is it, in your opinion, desirable that you should have many of those communications between the two main ways?—It is desirable at any time when they are needed to bring the air to the face; when the air becomes insufficient at the face where the man is working, it is desirable that there should be an opening made.

2727. But the more openings the weaker the level subsequently, since, in case of an explosion taking place, the stoppings are generally blown out, are they not?—In most cases.

2728. Then the fewer stoppings there are to blow out the better?—It is not the better for the workman that has to work in the bad air while he is going between the one and the other.

2729. But in cases of explosion, the greatest number of men lose their lives by after damp, do they not?—I am not aware that they do. Most of them, so far as my experience has given me to understand, lose their lives from injuries and burns, and being blown. Men have been blown so that they could not get out of the way, and there has been nobody there to help them. Sometimes men have been smothered; they were so injured that they could not go away themselves, and no one was there to help them.

2730. What number of explosions have you seen, or been practically brought into contact with?—I have not been brought into contact with many large explosions, but with small ones, where one or two men have been burnt. I have not been in any pit where any large explosion has taken place.

2731. Have you ever visited a pit after an explosion of an extensive character has taken place?—No, not in its rough state.

2732. You are not aware that a frequent occurrence of stoppings is considered very dangerous in well regulated collieries?—I am not aware of that. I should say, as far as my experience leads me to understand it, that the further they are between the more the diffculty afterwards. If the air is so bad that a man cannot go 20 yards, he cannot go 40 yards, of course.

2733. The more stoppings there are the more there are to blow down, surely?—Yes; but the fewer there are, the easier they are to put up. Of course, they must have air to get to the place to replace them.

2734. With regard to stoppings, the more there are, surely the weaker your main level, and the greater the danger of the men being exposed to the after damp; is not that so?—I do not know that.

2735. *Chairman.*] A great deal of the coal in the pit where you are is got by these cross cuttings, is it not?—A certain portion, but not the greatest bulk; they cut two levels, as we call them, along in this way (*describing it*); perhaps 15 yards of coal are left between, and at certain intervals, where they cannot work any longer on the face of the level, they have to cut so as to bring the air across.

2736. What is the distance in the mines that you have known between the two great air courses, the intake and the return?—About 130 yards, perhaps.

2737. Then you have occasionally to cut a passage from one to the other, have you not?—Yes.

2738. What is the usual thickness of a pillar between the upper and lower levels?—I do not know that I quite understand the question.

2739. Mr. *Vivian.*] Imagine that that (*handing a sketch to the Witness*) is your intake, and that that is your return; what is the width of that pillar?—That represents two pits, as I call them.

2740. What is the width of that pillar?—It is about 130 yards or 170 yards between the two pits.

2741. Between the two main levels, what is it?—70 yards between the two main levels; but there is what we call the end, besides the main levels.

2742. *Chairman.*] Can you state from your own knowledge that you have known a wall blown out by the fall of roofs in disused workings?—Yes.

2743. Have you any objection to make to any of the special rules in your district?—To the sub-special rules, we have.

2744. I am not talking of the contract rules, but of the special rules that are made under the Act?—Yes, as to those which have relation to the fencing of the pits; the cages and pits we think ought to be better fenced than they are; the pits ought to be lined, and the cages made secure with covers overhead.

2745. Have you a copy of the rules in your district with you?—I have not.

2746. Mr. *Ayrton.*] You do not refer to the particular rules in the Act, but to the special rules made by the proprietors, and hung up in their offices?—Those are what we object to as not having a voice in making them; and we think that they should be framed differently, and that the cause of the evil should be remedied; we are governed now by these bye-laws which they put on our shoulders.

2747. *Chairman.*] Then you do not object to any particular rules, but to the way in which the rules are made; you think that the men ought to have a voice in making them?—Yes; or in speaking against those that they think overbearing.

2748. But they are hung up for a fortnight, are they not, before they are put into force?—I do

I do not know if they are; if they are hung up the most of the men do not see them. When they go for their wages, the men are paid through a hole, and most of them do not see those rules.

2749. Are not you furnished with a copy of them?—After they are put into force.

2750. Mr. *Bruce.*] But surely the rules must be hung up for 14 days before they are sent to the Secretary of State to be approved, according to the regulation of the Act, must they not?—If they are hung up we men do not see them, and the men's attention is not called to the thing for them to know that there is such a thing going on, and, in consequence, they cannot object.

2751. The master is bound by the Act to do this: to have copies of the proposed special rules painted on boards, or printed upon paper and pasted upon boards, and to have the boards hung up in some conspicuous part of the principal office or place of business at the mine, and at the place where the workmen are paid, and that is to be done for a fortnight; then they are to be sent up to the Secretary of State and approved by him. What more would you have in addition to those provisions?—I do not know that I have seen any hung up in that way; but I would say that this more should be done: that each man should have notice that a rule was going to be altered before it was done.

2752. If copies are hung up in the offices, as the Act says, does not that give all the men sufficient notice?—If the men cannot read, then they have not sufficient notice.

2753. Do you mean to say that those who cannot read, cannot hear from those who can read, what is going on?—I cannot say.

2754. Mr. *Liddell.*] You say, as I understand you, that, in your opinion, whenever special rules are framed, or additional rules added to them, the men should be consulted; would you wish to have the whole 200, 300, or 400 pitmen called together to discuss a particular rule?—No.

2755. You say that now, although the rules are hung up, many men do not read them, and some cannot, and consequently that the men have not the means of acquainting themselves with what the rules are; and you say that their views ought to be consulted in framing the rules. I want to know what is your remedy to meet that difficulty?—I would say, give every man notice that such a bye-law was going to be altered.

2756. But then you would have to assemble the men, I suppose, if they had any objection to make, or would you allow each man to go and make his particular objection to the owner?—I would allow the men to assemble themselves, and send a deputation as to the general feeling.

2757. Mr. *Ayrton.*] Do you know whether any objections have been sent to the Secretary of State from your district to any of the special rules?—I am not aware.

2758. Do you and the miners understand that you have the power of sending to the Secretary of State a representation on the subject?—I do not think that the miners do understand the thing to be so.

2759. *Chairman.*] Is there any other point on which you would wish to give evidence to the Committee, that we have omitted to ask you about?—Yes, as to inquests and the mode of selecting juries.

2760. You are not satisfied as to the mode in which juries are selected; is that the case?—We are not.

2761. Have you had occasion to attend any coroner's inquests?—Yes.

2762. Have you attended them as a witness, or as one of the public?—I have attended both as witness and as juror.

2763. How came you to be summoned as juror?—A policeman called me.

2764. Is it the practice to summon the miners upon the jury at all in that district?—It is not a common practice to summon them. If the policeman is hard up for a juryman he will summon a miner.

2765. If he can get no one else, you mean?—Yes.

2766. When you were acting as a juryman did you agree with your brother jurymen. Answer the question without going into detail. We will not try the case over again?—In the last case I was on, the mine owner had to pay damages for 300*l.*

2767. You were satisfied, then, with the verdict of that jury?—Yes.

2768. Have you been upon the jury more than once?—Yes.

2769. Have you found your brother jurymen not generally disposed to do justice?—They do not understand the subject generally. Men that are not acquainted with the nature of the work of the colliery do not understand generally the way to put the questions to the witnesses, and, consequently, they do not derive proper information from them.

2770. Then it is not want of fairness that you speak of in the juries, but want of knowledge?—Yes.

2771. And you think that in those cases where they have not given a proper verdict, it has been because they were not sufficiently informed as to all the circumstances of the case?—Yes.

2772. You were the means of their getting that information when you were on the jury, were you?—Yes.

2773. What was the verdict in that case, where they gave damages of 300*l.*?—That the master had not complied with the law.

2774. When you have been before the jury as a witness have you been dissatisfied with the conduct of the inquiry?—There have been cases where I have not felt exactly that they understood the subject, or where I thought there was some disinclination, if they did, to give a verdict justly.

2775. Did I rightly understand you to say that you have examined the witnesses when you have been a juryman?—Yes; when I have seen that the other jurors have not understood the information which the witnesses have given.

2776. What have you to suggest as to the composition of the juries?—I would suggest that something like one-half of them should be colliers, so that they could put those questions which are necessary.

2777. Mr. *Liddell.*] As a matter of fact, how many other pitmen were on the jury when you served upon a jury?—I was the only miner.

2778. You say that, in your opinion, the miners ought to form at least one-half?—Yes.

2779. You have also said that the policeman only summons a miner as a juryman when he is hard up?—That is generally the case.

2780. Are you quite sure that he might not have received express instructions to call you, knowing

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knowing you to be an experienced miner?—I am not sure either way.

2781. You still think he took you because he could get nobody else?—Yes.

2782. Mr. *Vivian.*] Is not the inspector present at coroner's inquests on miners killed in mines?—Generally; sometimes he is not; he was present at that inquest.

2783. Do not you consider that the inspector is qualified to put such questions as may develope the true facts of the case?—I have known the coroner to object to his questions, and say that he had not a right to put them.

2784. That is not an answer to my question; I ask whether you do not consider that the inspector is competent and feels it his duty to put such questions as will develope the true facts of the case, so far as the technical part of the case is concerned, quite as much as a miner?—He is competent, and understands the subject as far as I have been acquainted with him; but as to his doing his duty, I have heard the coroner object, in certain cases, to his questions.

2785. But surely he is there for the purpose, is he not, of developing the merits of the case?—I should say that ought to be his work, according to his office.

2786. *Chairman.*] Have you any other point on which you wish to give evidence?—Yes, with respect to weighing.

2787. In your district the payment is by measure, is it not?—Yes, by measure.

2788. And are you dissatisfied with that mode?—Yes; we would rather have the tubs weighed than be paid according to what we send up.

2789. Is that the general feeling?—Yes, that is the general feeling.

2790. Is it the universal feeling?—If the men were consulted, I do not think there would be one who would not hold up both hands for it.

2791. You think they would all rather be paid by weight than by measurement?—Yes, and that the weight should be properly inspected.

2792. Mr. *Woods.*] The Honourable Chairman asked you if in your county the colliers were paid by measure. I suppose you mean by your answer that they are paid in part by measure?—They are paid by measure.

2793. Have you no yardage system?—Yes.

2794. And part of the wages is paid by the lineal yard, measured along the drift which you are forming?—Yes, in the narrow work.

2795. And the other part is paid by the score?—Yes.

2796. Then when the narrow work is finished, and you are bringing the pillars back, you are paid by the scorage only, I presume; when you come near a fault or a step, is there any allowance made for that on the yard?—No, not unless the place is very bad.

2797. If the place were wet there would be an allowance per yard, would there not?—Yes, in some cases.

2798. You could not pay that portion of the work by weight which is measured by the lineal yard, could you?—What I mean is this, that all the coals that are now paid by measure should be paid by weight. The yards are a thing that we have no idea of interfering with, because we do not know that there is any difference between the masters and the men about that.

2799. Under the system of working coal mines in your neighbourhood, it is not possible to pay the entire wages by weight, is it?—I do not know whether it be possible or no; perhaps it might be; perhaps they might arrange things so as to take an account of the extra pay which ought to be laid on the weight for cutting the yard. If it were arranged in that way it would be the same thing one way as the other. I do not know that it is impossible.

Mr. ROBERT WOODWARD, called in; and Examined.

Mr. *R. Woodward.*

2800. *Chairman.*] WHAT are you?—A working collier.

2801. In what district?—In the Haydock district, near St. Helen's.

2802. How old are you?—Thirty-two.

2803. How long have you been at work as a collier?—Twenty-four years. I worked one month in a factory at first.

2804. You did not begin regular steady work then?—No.

2805. Are you working now in the same district where you have been all your life?—No; I worked near Bolton.

2806. You have not worked out of Lancashire?—No.

2807. How long have you been working in your present mine?—Twelve years in the present district.

2808. Whose mine is it?—John and Thomas Johnson's.

2809. You have heard, I believe, most of the evidence given here. Without my going through the same points again, will you tell us what are the points you would like to be examined on?—I should like to be examined on the weighing clause for one thing, and on the Inspection Act.

2810. The Inspection Act is a very wide Act. What point in the Inspection Act do you refer to?—We want a better inspection.

2811. As to the weighing, have you taken particular notice of that point?—Yes.

2812. And what is the opinion you have come to?—That we ought to have our wages by weight instead of by measurement.

2813. And is that the general opinion of the men?—Yes.

2814. Should you say it was the universal opinion?—Yes; in my district it is.

2815. Mr. *Vivian.*] Have any applications been made to the masters to put weighing machines at the pit heads, and to adopt that system?—Yes.

2816. Can you state any instances of such applications having been made?—Yes; the masters have been asked if they would allow us to have our coals by weight, and to have a man on the ground to see justice done between the master and the men.

2817. You, yourself, went with others to the master that you are working for, and made that application; is that what you mean?—No; I was not on the deputation at the time; other men were picked for the deputation.

2818. And the masters declined, did they?—Yes.

2819. How

2819. How many masters declined? — Two of the masters.

2820. When was that?— Last February.

2821. General *Dunne.*] Have you any doubt that you suffer a good deal by the system of measurement as you have it now?—Yes, we suffer greatly by it; because, in the first instance, the boxes were stated to us to be six hundred weight, and they now contain seven hundred weight, or nearly.

2822. Then that is an actual fraud on the colliers?—Yes.

2823. Do you think there can be any fraud practised with the system of weighing?—Not if there were an imperial weighing machine, and the inspector inspected it.

2824. Do you suppose that there would be any difficulty in having the weights inspected from time to time by the inspectors?—No.

2825. Do you think there is a sufficient number of inspectors to examine the weights without an increase of their number?—Yes.

2826. Mr. *Clive.*] Did you ever hear of any objection to the weighing system?—No, because we have none of it in our district.

2827. Did you ever hear any reasons given by the masters against weighing?—Yes.

2828. What are the objections urged against it?—They say that it would be too much labour to weigh every box that comes up out of the pit.

2829. And that is, all is it; they made no other objection than that?—No, they made no other objection than that.

2830. *Chairman.*] You say, I think, that the inspection of mines generally is not sufficient?—No, it is not.

2831. How often does the inspector come into the district?—I have not seen him more than once during my time in St. Helen's.

2832. How many years is that?—12 years.

2833. What did he do when he came?—I was going up at the time I saw him arrive, and he was going down to the bottom.

2834. Did you hear how long he stayed on that occasion?—No.

2835. Mr. *Clive.*] What was his name?—Mr. Peter Hickson, of Manchester.

2836. *Chairman.*] Was there any particular occasion for his coming at that time?—Not that I know of.

2837. They do not usually come except when they are sent for, do they?—Not that I know of.

2838. What have you to suggest about inspectors?—I think that there are not enough to do the work throughout the collieries.

2839. You would like to have an opportunity of seeing the inspector oftener and making complaints to him?—Yes, for him to see that the managers did their duty.

2840. You think that in consequence of the inspector not coming, there is a want of proper management?—Yes.

2841. In what particulars do you think there is a want of proper management?—In the workings where we work; the openings in some instances are not made up with bricks and mortar; they are stopped up with rubbish, and in many cases they are not stopped up at all.

2842. That is to say, sufficient care is not taken as to the ventilation?—No.

2843. Is there any other defect in consequence of the inspector not coming?—Not in relation to ventilation, that I know of.

2844. Are you satisfied with the firemen that are employed in the mines that you have known?—No.

2845. You think they are incompetent, do you?—Yes, I think they are incompetent.

2846. What are they paid?—Their wages vary from 21*s.* to 24*s.* per week where I am working.

2847. Are the wages of the firemen the same as the wages of the other men?—The men work by piece work.

2848. But what does a man earn upon an average, in the week?—Between 4*s.* and 5*s.* a day in the district where I am.

2849. How many hours do they work in your district?—From 12 to 14 hours.

2850. They are down in the mine from 12 to to 14 hours?—Yes.

2851. Is it considered a better thing to be a fireman than to be a common workman?—Some prefer it.

2852. It is more regular pay, I presume?—Yes.

2853. Is it considered a preferment by a workman?—Yes; he reckons that when he beomes a fireman, he is more advanced towards a managership.

2854. According to your opinion, the firemen are not quite competent to their duties?—No.

2855. Is it from want of knowledge, do you think, or from want of attention, that they are not competent?—I have known firemen to be taken as firemen, that have not worked on the pit above some two or three years.

2856. What is particularly required, do you think, in a fireman; education or knowledge of a particular pit?—Knowledge of the working of a pit, and the gases, and the way in which the air is to be regulated.

2857. Have you anything to suggest as a means of securing that?—Yes. I should say that the firemen should be examined before some mining engineer previously to their taking that situation.

2858. In the mines where you have been working, have the visits of the fireman been frequent enough; has he gone his rounds often enough?—No, not where I am working.

2859. When you go down in the morning, how long has the fireman been before you?—He generally goes down at three in the morning, and we are allowed to go any time after; there is no particular rule. The miner goes down many a time and never sees the fireman at all.

2860. The miners know whether the fireman has been there, do not they. Does not he leave a mark as a sign of his having been there?—Yes, he leaves the day of the month on the place.

2861. So that you know when you go to the working whether the fireman has been there or not?—Yes.

2862. If he goes down at 3 o'clock, he could not be more than three hours before you?—No.

2863. How many firemen are employed in the whole pit?—I think six.

2864. Are they enough to do the work?—Yes, they are enough to do the work, but they neglect their work.

2865. General *Dunne.*] The inspection is careless, is that what you mean?—It is careless, and neglected in our district.

2866. Mr. *Liddell.*] Do you consider that any man is competent to be a fireman who has served in a pit long enough to understand the workings

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of the pit, and the nature of the gases in that pit?—Yes.

2867. Then it is rather experience of a particular pit than a high standard of education that you want in a fireman, is it not?—Yes, the general experience of a mine; the practical part.

2868. It is not a very popular office, is it; men do not like it?—No, excepting in this way, that they think they will be elevated if they take it.

2869. They like it, as I understand you, for the prospect of promotion, but they dislike it on account of the responsibility that it involves?—Yes.

2870. Would you make it a qualification of a fireman that he should have served a certain number of years in any one pit?—Not in any one pit, but in pits generally.

2871. That he should have served a certain number of years as a collier?—Yes.

2872. But you say you have known cases in which a man has been made a fireman after very short experience?—Yes, I have.

2873. Was he a very young man?—He was about 27 when he started in the pit. He had never done a day's work at all in the pit.

2874. And had never been a pitman before?—He had never been in the pit before.

2875. Was it during the time of the Lancashire distress and the cotton famine that that occurred?—No.

2876. Do you find that the firemen are always willing to attend to any complaints made by the men?—No, they are not willing, because I myself have made complaints to them of the air not being sufficient; and I have even had to come up because I could not work any longer for want of air to push the smoke and the gas off, and owing to the heat.

2877. Was that owing to ignorance on the part of the fireman?—It was owing either to ignorance or to negligence.

2878. Or both?—Yes.

2879. Did you complain to the master of the ignorance or negligence of the fireman in that case?—Yes, I went to the underlooker, and the master's son came, and during the day they went and fixed the cloth at the bottom of the brow.

2880. They made the arrangements that you thought were necessary?—Yes.

2881. Did they continue that same man in the office of fireman?—Yes, he is there now.

2882. Was it the fireman's duty to make those arrangements that you say the master's son made afterwards, upon your representation?—Yes, it was the fireman's duty to do it. The cloth was fixed up, but he pulled it down because a pony could not go under it.

2883. And thereby he hindered the ventilation?—Yes.

2884. Mr. *Foster.*] Any complaint made by a workman to the manager of the colliery of the neglect of a fireman would be generally attended to, I presume, by the manager of the mine?—I should say so.

2885. With regard to the fireman you allude to as having had only two years' experience in the mine, was he a man of superior natural intelligence, and had he had any education which qualified him particularly for that appointment?—I do not think he had had any more education than the collier generally gets.

2886. You said that he had not done a day's work, but at the same time you said that he had been two years there, did not you?—He had worked down the pit only two years previous to his entering on his place as a fireman.

2887. I understood you to state just now that he had not a done a day's work in the pit?—Not in getting coal as a collier; he had been generally employed in day waging, that is to say, looking after the roads, getting them in repair, and shifting stuff.

2888. He would not be less likely on that account, would he, to get an adequate knowledge of the pit?—Yes; because generally those men go into places where the pit is ventilated, and not to the far end where the miners work; they are employed in getting drawers to draw the coal out to keep the pit moving.

2889. Had this man any authority at all during those two years?—No, he had no authority; he was only a common workman.

2890. General *Dunne.*] You say you see the inspector seldom?—I have seen him only once in the pit in my life.

2891. But have you heard that he has been down; it is possible, I suppose, that you might not see him, and yet he might have been there?—I have not heard of his being down the pit where I was.

2892. Is there any person in his place, who generally looks after the ventilation of the pit?—No, not in the inspector's place.

2893. But are there not persons who look over the colliery on the part of the proprietor?—Yes, the manager.

2894. He is the servant of the proprietor?—Yes.

2895. There is no one on the part of the public or the colliers themselves to look after it?—No.

2896. Do you propose that some one should be appointed for that purpose?—Yes, that there should be sub-inspectors.

2897. And that they should come at uncertain times, and more frequently?—Not less than once a month, and then go round the whole of the workings.

2898. Mr. *Vivian.*] You say that the inspector has only been at your pit once in the last 12 years?—Not more to my knowledge.

2899. Could he have been there frequently without your knowing it?—He might have been there without my knowing about it.

2900. You say that openings are sometimes not stopped; what is the effect of not stopping an opening?—The air escapes, and does not go to the place where the miner is working.

2901. May not that be properly and advisedly done by the manager of the pit in order not to put too great a drag upon the air?—No; there is sufficient air to ventilate the whole of the part where I am working that comes down to the level at the bottom of the brow, if it was properly stopped up, and the air sent round the working.

2902. There is no harm, is there, in the whole of the air not going to the face if sufficient air goes to the face properly to ventilate it?—No.

2903. Is there a proper quantity going to the working place?—Yes.

2904. But the air is escaping through an unstowed opening?—No.

2905. You say that incompetent firemen are selected; why do you imagine that masters who, I presume, have a great stake in the safety of their mine, select incompetent men?—I cannot say except it be the wages.

2906. Then you think that for the sake of a few shillings a week a master will endanger the safety

safety of the pit?—I cannot imagine anything else.

2907. Mr. *Woods.*] You described the ventilation that was turned simply by an air cloth; not a braddice?—Yes.

2908. If it was an air course, turned simply by a cloth, it was not in the main courses; it was a minor one?—The whole of the air came there.

2909. And the fireman took the cloth away because the pony could not go under it?—Yes.

2910. What did he substitute for it?—It was left open for two days.

2911. Then the main air course was left entirely open for two days?—Yes; but it escaped this brow when I was working, and went forward up the other.

2912. Then it ceased to be, as far as you were concerned, the main air way?—Yes.

2913. *Chairman.*] Was this in the main air way?—The brow that I worked up started from the main air way; there was another part of the brow 40 yards farther on; but at their extremity there was a pair of doors fixed to turn the air up both brows, and there had to be a cloth fixed between the other brow and this that I worked in to turn the air up.

2914. Then the cloth that was fixed to turn the air was taken down, and allowed to be down for two days?—Yes.

2915. By "brow" you mean working up hill?—Yes.

2916. Mr. *Woods.*] When it was working, then was the main air course turned past you before the cloth was taken down?—Not past me, but past the other part.

2917. Mr. *Clive.*] How long have you been at work in your present pit?—Twelve years in the St. Helen's district. I have not worked more than three years in the present pit, but I have worked three years more in another pit, belonging to the same masters, and the remaining six years at Haydock Colliery, near St. Helen's, belonging to Mr. Evans and Sons.

2918. Have you ever known an explosion during that time?—Yes. I have known small explosions where men have been burnt, but not badly.

2919. You say that education is necessary in a fireman, do not you?—Yes.

2920. And also you say that knowledge of a pit is necessary?—Yes.

2921. Which do you prefer of those two, the education or the practical knowledge?—I would rather have a practical man that knew the pit, than an educated man that did not know the pit.

2922. How could an inspector, by examining, settle that for you?—By inquiring about the gases. A practical miner will be able to state how the gas is accumulated in that pit.

2923. But how could the inspector determine that by examination; supposing an inspector had to examine, say, 500 firemen, how could he ascertain whether each man knew the gases in each pit?—I cannot say.

2924. *Chairman.*] Have there been accidents, from falling in of roofs, in the mines where you have been working?—Yes.

2925. Have there been many accidents?—Not many; a few.

2926. In the district which you are acquainted with, women work, I believe?—Yes.

2927. Is there any large proportion of women employed?—Yes, there will be about 100 in the whole district; perhaps more.

2928. How many men?—I cannot say for the whole district.

2929. Take the mine where you are working, how many have you there?—Two hundred colliers.

2930. And how many women?—About 10 or 15 women.

2931. Working at the pit's mouth?—Yes, at the pit's bank.

2932. What age are they?—They vary from 15 to 50 or 60 years of age.

2933. But they are mostly young women, are they not?—They are mostly young women.

2934. How long do those young women continue working; they do not go on working when they are married, do they?—Some do.

2935. Not when they have children, do they?—Yes, I have known women to work on the brow who had children at home.

2936. That is not generally the case?—No, they are mostly young women and widows who work on the bank.

2937. Whom do these girls generally marry?—Colliers, mostly.

2938. Do not the colliers like marrying these girls?—I should say they must, or else they would not do it.

2939. A girl has no difficulty in finding a husband because she works at the pit's mouth, has she?—No.

2940. What is your feeling about the employment of women?—I think that the work is too laborious and too dangerous for the women, where I am working.

2941. What work do they do; do they pull the tubs out of the cage?—Yes, there are two tubs abreast in each compartment; four tubs at once, and one woman pulls out on one side, and a man on the other side.

2942. They are flush with the ground?—They are both level with the ground, and the man is one side of the cage and the woman on the other; they each pull one out.

2943. What is the weight of these tubs?—Seven hundred weight; they should be six hundred weight.

2944. Then the women take them to the loading place, do not they?—They tip them into the waggons.

2945. How far have they to take them into the waggons?—It varies. In some places they tip them into the waggons about five or six yards from the pit's mouth; in other cases, 20 or 30 or 40 yards.

2946. Do they run them along a tramway?—No; but wheels are fastened to the trucks.

2947. That is hard work, is it?—Yes.

2948. The railway comes up also to the pit's mouth, does it?—Yes, they put a branch there.

2949. And the women have to draw these tubs to the place where the railway waggons come up?—Yes, and tip them into the waggons.

2950. What reason have you for saying that that is very hard work; have you tried it yourself?—Yes.

2951. And by the strength that it required you are enabled to say that it is very hard work for a woman?—Yes, it is.

2952. Have you known the women suffer in health by it?—Yes; I have known that, through the wet and cold, and the labour they have to perform, they have not been able to attend to their work regularly.

2953. They

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2953. They are exposed to wet and cold, you say; are they not working under cover?—No, not in most places; in some places they are covered in where they tip the waggons.

2954. There are not a great number of women where you are?—No, 15 or 20.

2955. To 200 colliers?—Yes.

2956. What is the feeling among the colliers as to the employment of women now?—That it is rather degrading and immoral.

2957. Is there a strong feeling among them about it?—Yes.

2958. Is there any difference of opinion about it?—They do vary in opinion about it.

2959. What is the opinion of the more educated workmen—the better class—about it?—That they ought not to go on to the pit brow to be exposed to the miners in the way they now are; it is generally degrading.

2960. Is there anything indecent in the mode in which women are employed?—Not indecent; not more so than in general cases.

2961. What do you mean by "not more so than in general cases"?—Not more than in factories and such like work; there cannot be any more indecency in it as regards the mixture of men and women than there is in factories.

2962. But you consider it too hard work, and degrading in its nature?—Yes, and too dangerous.

2963. What does the danger consist in?—Lowering the waggons, and having to break them down generally; it is very slippery of a wet morning, and some have not any presence of mind when they get between the waggons.

2964. It was in that way that a little girl was killed, was it not?—Yes, at Rainford; that is not in my district. As the waggons are filled, they have to lower the full ones and draw the empty ones after them to the tippers, where they tip the coals.

2965. How much coal do these waggons that the women have to do with contain?—Seven hundred weight.

2966. That is dangerous work, you think, do you?—Not taking those small waggons, but it is dangerous for the women to lower the railway waggons.

2967. Do you mean to say that they have to lower, after they are filled, the waggons that go upon the line?—Yes.

2968. What do those waggons weigh?—Six tons.

2969. They have to lower down an inclined plane the regular large waggons that go upon the line?—Yes.

2970. Have they to get upon the tramway to do this?—They have to get off the waggon and leave the break up when it is full, and draw it from under till the other empty waggon gets underneath.

2971. They have to take a break away so that the waggon runs down?—Yes.

2972. The break is a sort of block of wood, is it not?—An iron break put to the wheels, and when it is upon the brow they have to have a lever and lever the wheels.

2973. Mr. *Foster.*] What is the feeling of the women themselves (what you have been speaking of before is the feeling of the men) with regard to this kind of labour?—They say they would have no objection to come off the pit bank if they could find any other employment.

2974. Are you aware that in many coal districts there would be an impossibility of finding other employments?—For a certain length of time there would be. If it was stopped immediately there would be difficulty.

2975. Do you think that this kind of work, generally speaking, is more laborious, or involves greater exposure to the weather than brickmaking, for instance, in which a great number of females are employed?—There is no more exposure to the weather, but it is more laborious as far as the work is concerned.

2976. Are you aware that there are a great number of women employed on the pit banks at labour far less laborious than that which you have described?—Yes, they are not all alike.

2977. For instance, in picking the small pieces of iron on a pit bank or an ironstone bank; there is very little real labour in that kind of employment?—Yes; it is not very hard work to do that.

2978. Are you aware that there are a great number of women who earn their living in that way in the iron district?—I do not work in the iron district.

2979. Would you wish to forbid the employment of women in that way?—Yes.

2980. Why?—Because I do not think it is a fit employment for women.

2981. Do the women think so themselves?—I believe they do.

2982. Do you not think it would be a very great hardship to prevent, by Act of Parliament, women who are willing to work in that way from doing so?—We should not want to have it so legislated upon as to cause them to drop off all at once; we would let it run two years, but not allow any more women to be employed on the pit banks than are working at present, and at the end of that time we would let the whole of them go; it is our opinion that in that time they would get employment in agriculture, or in the factories, or in glass-houses.

2983. How would that be in districts where there are no factories or glass-houses?—It would be difficult there to find employment.

2984. Mr. *Ayrton.*] Do you think that it is just as easy to prohibit the employment of women aboveground as it was to prohibit the employment of women underground?—I should say so.

2985. Did any great mischief occur when the women were prevented from working underground?—I have very little recollection of that; it was rather earlier in my time.

2986. Mr. *Vivian.*] Can you tell me why you would propose that there should be legislation preventing women from working in collieries, but not preventing them from working in any other industrial pursuits in England?—For the sake of the bringing up of their families when they yet married. There are often cases happening in which it leads to separation between the man and his wife, through her incompetency to bring up the family.

2987. Is that more the case where they work in collieries than in other work?—Yes; because they have not time to go through their domestic duties. When they get home, owing to the weather and their laborious work, they fall asleep almost at once.

2988. Why is that the case in collieries more than in any other employment. If you prevent women working on the tops of collieries, would you not prevent them from doing any other description of hard work in England?—No.

2989. Then

2989. Then why would you prevent them in the case of collieries more than in the case of any other work?—Because it is dangerous and laborious work.

2990. Do many cases of death to women occur from working on the pit's bank?—Several have occurred in our district.

2991. I suppose women are now and then killed in other ways. They are now and then run over in the streets, are not they?—Yes.

2992. And in various other ways they meet their deaths, do not they?—Yes.

2993. Then you cannot say why you would prevent their working in collieries, and in no other industry in England?—No.

2994. Have you any notion that they do interfere with the employment of men?—No; they do not interfere with the employment of men.

2995. Who would do the work if women were not employed?—The men would have to do it.

2996. Then they displace a certain number of men, do not they?—Yes.

2997. Then they do interfere with men, do not they?—Yes, in that way; but I thought you asked just now about their interfering with the men who are at present at work.

2998. General *Dunne.*] The wages of women are lower than those of men, are not they?—Yes.

2999. And the object of employing women is to make it cheaper to the proprietor?—Yes, I believe it is.

3000. It is for the sake of economy to the proprietors, in fact, that they employ women?—Yes.

3001. And you consider it a masculine and unfit employment for women?—Yes.

3002. And you would recommend that the law should prevent it?—Yes.

3003. Mr. *Vivian.*] Have you never known the case of a widow being so employed?—Yes.

3004. Do not you consider that it is a great advantage to a widow to be able to earn something for her support?—Certainly.

3005. Would you pass a law to prevent a widow from being able to work for her daily bread?—No; I would not pass a law to disable her from that; I would allow a certain time to enable her to get other work.

3006. But you would shut the colliery door against her?—Yes.

3007. Mr. *Woods.*] You told the honourable Member for South Staffordshire that you did not know anything about iron mines; but is it the custom in your county for the women to pick the waggons and the coal?—Yes.

3008. Mr. *Clive.*] There are two reasons why you would prohibit women from working on the pit bank; one being because they cannot attend to their families at home, and the other because the work is too laborious and dangerous?—Yes.

3009. Should you be satisfied if the women were prevented from doing work laborious or dangerous?—Not fully; I should like them to come off wholly.

3010. Can women employed in gas-houses or factories attend to their families at home?—Yes; because the work is not so hard, and they are under a shed all the day.

3011. But if the laborious work, and the wet work, and the dangerous work, were taken off, would you object still to the employment of women, supposing they were under shelter?—No.

3012. *Chairman.*] How far is this district from the district where the last witness came from?—About 17 or 18 miles.

3013. Is the dress of the women employed on the bank like a man's dress?—Not in the district where I work; they wear drawers, and petticoats down to their shoes in our district, but in other places in the neighbourhood they wear breeches.

Monday, 23d April 1866.

MEMBERS PRESENT:

Mr. Bruce.	Mr. Greenall.
Mr. Clive.	Mr. Kinnaird.
General Dunne.	Mr. Liddell.
Sir Philip Egerton.	Mr. Neate.
Mr. Ferrand.	Mr. Hussey Vivian.
Mr. William Orme Foster.	Mr. Woods.

CHARLES NEATE, Esq., IN THE CHAIR.

Mr. JOHN NORMANSELL, called in; and Examined.

Mr. *J. Normansell.*

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3014. *Chairman.*] WHAT are you?—I am a Miner, but at present I am the Secretary of the South Yorkshire Miners' Association.

3015. You have been a working miner, have you not?—I was a working miner from seven years of age up to 1859. Then I was placed on the pit bank to check the men's accounts, as a check weigh man. Up to 1865 I was a check man, and now I am the Secretary of the South Yorkshire Miners' Association.

3016. In what mine did you work?—For about four years, previous to 1859, I worked at what they call the Wharncliffe Silkstone Mine of Jeffcock and Company.

3017. How came you to enter upon the work so young as seven years old; did your father put you there?—At that time, I believe, it was customary to take the children into the mine very young.

3018. What was the mine where you first began?—The first mine I began at was in Cheshire, Clayton & Brook's collieries, near Stockport.

3019. In what year was that?—I was about seven years of age, and now I am 38; it was, therefore, 31 years ago.

3020. Confining yourself to the mines where you have been in the last seven years, are there many boys employed in the particular mine where you are now?—The place where I am now is in the district of South Yorkshire, and I could give the Committee something like the number of boys employed in the mines of South Yorkshire for an area of about seven miles.

3021. Is that district of South Yorkshire an inspector's district?—Yes, it is an inspector's district.

3022. How do you describe that district?—The district that I am here to give evidence for is the district of South Yorkshire, and it consists of an area of about seven miles.

3023. Are there many boys employed in that district?—We take them to be boys from 10 to 14 years of age. Perhaps, as near as I can ascertain, the number is something like 1,700 or 1,800 between the ages of 10 and 14.

3024. What proportion would that bear to the number of men. There are about 10,000 pitmen.

3025. And of those boys, between 10 and 14, how many are under 12, do you suppose?—There are not many between 10 and 12.

3026. There are not many boys taken now under 12, are there?—Very few in South Yorkshire; there are some few perhaps out of 1,700; there may be about 200 or 300 between 10 and 12.

3027. Are those that are under 12 generally required to produce a certificate?—In some instances it is so, but not in all of our collieries. In some cases it is not strictly attended to, and in some it is.

3028. Has there been any change for the better since the Act of 1860?—Yes, there has been a great improvement. Most of the boys now between the ages of 10 and 14 can read and write; they can write their own names, of course, and we do not go much further into it than that.

3029. What is the work that the boys chiefly do in that district?—There are all kinds of work for them to do. In our mines of South Yorkshire they drive horses, open and shut doors, attend to self-acting planes or engine planes, assist the hangers-on at the shafts, and do odd work. Some of them assist the hurriers; where it is very heavy hurrying for a young man, he has the assistance of a boy.

3030. Are they put to work beyond their strength at all?—Some of them are put to do heavy jobs, of course.

3031. Do you mean that it is not the practice that they are put to work beyond their strength?—Most of the work beyond that of opening doors and pony driving is almost too heavy for boys under 12 years of age.

3032. But most of the boys are over 12, you say?—Most of the boys in our district are over 12.

3033. What are the hours of the boys; when do the boys go to work?—The hours of the boys between the ages of 10 and 14 in our district are something like from 9 to 10, taking the average hours. There are some that work 12 hours, but the average is between 9 and 10.

3034. What

3034. What are the hours of the men?—About eight, a little over.

3035. What time does their work begin?—At six o'clock in the morning. They begin to send coals. They all have to get down the pits by six o'clock, and the miners come out again by two in the afternoon; perhaps a great many of them will be out by half-past two.

3036. And the boys remain beyond that time?—Till three and half-past three, and four o'clock.

3037. What are the boys doing after the men come up?—When the colliers and hurriers leave off working the corves are full, and the boys are supposed to get them clear, so that they can start empty the next morning. That is the work they chiefly do, and sometimes after that is done they are set to do odd work; to clean roads and other work, so as to keep them in till something like half-past three. Some of their employers allow them to come out as soon as the corves are empty.

3038. Most of them are employed about 10 hours, I understand you?—Yes.

3039. And often not above nine?—Yes; there are some that are only employed about nine.

3040. How long have the men been working only eight hours?—In 1858 they commenced the eight hours.

3041. As to the education of the boys, what have you to say?—The education of the boys is much better since the Act of 1860 than it was previously. The prohibition which prevents the boys from coming to the pit until they are 10, and their having to go to school between the ages of 10 and 12, has had a tendency to keep them from the mine altogether; they continue at school longer, many of them; and most of our boys now can read and write.

3042. Most of the boys then, in your district, are kept at school from 10 till 12 years of age?—Yes, most of them; there are some few, of course, that are not.

3043. In the district of which you spoke what is the number of schools?—There are a great many schools in our district, National schools and private schools, and one sort of schools and another. Some employers have schools near the pits; very close to the pits in some cases.

3044. Do the boys, between 12 and 14, go to school much?—No; they do not go at all between 12 and 14; they give it up generally then. Some few attend the night schools between 12 and 14.

3045. How many hours schooling in the week have those 200 or 300 boys in the district, of which you have spoken?—Those that are between the ages of 10 and 12 get a few hours in the week. In some of the places, not in all of them, they carry out the requirements of the Act.

3046. That is six hours a-week?—Yes.

3047. Do they get these six hours a-week?—Yes; they generally stop at home half-a-day, purposely, to put that six hours schooling in.

3048. What would you say generally as to the state of education of the boys in that district; is it satisfactory or not?—It is not satisfactory, although great improvements have been made; for this reason, we think that a boy should be better educated than merely to write his own name or to read. The alterations that we would wish to make, would be simply to keep them out altogether till they are 12 years old, and then not work them more than eight hours per day from 12 to 14. We think that would be a great improvement to the position of the day generally, in course of time, because we consider that if a child goes to school until he is 12, and is then crammed into the mine, and continues to work a large number of hours, he loses the little education he has got.

3049. If a boy is well taught till he is 12, he will learn a great deal more than mere reading and writing, will he not?—Yes; but there are not many that will go till they are 12; they are safe to go backwards after they are 12.

3050. Are the miners generally favourable to a restriction, keeping the boys out till 12?—Yes, the great majority of them in our district are favourable; it is only a few that would have their children go to work before they are 12 years old.

3051. Have you noticed any improvement in the conduct of the miners since the education has been improved?—Yes, in the last few years in South Yorkshire there has been a great improvement in the mines generally.

3052. In consequence, do you think, of better education?—In consequence of the Act of 1860; of course we cannot attribute the improvement in the older miners to that Act, but in the younger there is a great improvement owing to that Act.

3053. Now, leaving the question of the boys, are women employed in that district?—We have no women, as far as I am aware, that are employed at all on the pit banks. I do not know that there is one woman employed among the 10,000 workmen we have in South Yorkshire. There are perhaps half a dozen women employed on the ironstone heaps.

3054. What do the same class of women who are employed at the pit's mouth in outer districts do in this district instead?—I cannot say exactly what the women do in this district in place of what the women do in the districts where they work on the pit hills, but there does not appear to be any disposition at all on the part of the employers in our district to employ women, and there is very little disposition on the part of the men to get their wives, or even their daughters, on the pit banks. There are a few women that work in the fields at agricultural work, but not many even of them.

3055. Mr. *Bruce.*] What is the nearest large town to this district?—Barnsley is one of the places, and we go near Sheffield from this district that I come from, and Rotherham, and Masbrough.

3056. *Chairman.*] I understand you to attribute the non-employment of women to the right feeling of the employers in the neighbourhood?—Yes, in our district they appear to have a higher tone as regards the females than they have in some districts.

3057. You do not hear any of the miners complaining that they cannot get work for their daughters at the pit's mouth?—I never hear any such complaint at all; I never hear it asked for; there is not the least sign of any one wanting to put a woman or a child either there.

3058. You say that the feeling of the miners is against the employment of women?—The feeling of the miners is against their employment, even the lowest miners we have in our district do not seem even to think of putting a woman on the pit's bank.

3059. Mr. *Bruce.*] You say that one effect of the Act of 1860 has been greatly to diminish the employment of boys between the ages of 10 and 12 at the collieries?—Yes.

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3060. Therefore a change in the law which absolutely prohibited their employment until 12 years of age would not, so far as your district is concerned, work any great change?—It would not make such a great change in our district, but only in the cases of something like 300 that are employed between the ages of 10 and 12.

3061. Now, practically, do you think the employers would get over the difficulty arising from the shortening of the hours of the boys' labour between 12 and 14 years of age?—I think the short hours would affect the employers but very little in our district, because the miners do not work more than eight hours generally, and it is very easy for the boys to give over at the same time as the colliers give over in our district.

3062. There is some work done by them that must be done by somebody, I suppose?—Yes; but when the colliers and the hurriers cease to draw coals there is no work that must be done absolutely.

3063. The coal would have to be conveyed to the pit in order to be carried up, would it not?—I have said that the boys are generally kept in later for the purpose of emptying the corves or tubs.

3064. If the boys left at the same time as the men it would be necessary to do that the first thing the next morning?—Of course it would, if the boys over 14 years of age did not do the work. There are many youths employed at this work over 14 years of age who are also placed with the boys between 10 and 12 years of age.

3065. But would not this necessarily follow, either that a larger amount of labour must be employed to do the work, or that higher wages must be paid, in order to induce the men to work longer?—With reference to a higher rate of wages being paid, it is well known that a boy of 15 or 16 does not like to do work of the same class as that which he would do at 12 or 13. But still there are a great many of these youths that are over 14 years of age that the law would not touch at all.

3066. However, you are of opinion that there would be no practical difficulty in carrying out such a change of the law as you suggest?—I think there would be no difficulty in the district I come from in carrying out that change. We always find, and have proved from experience, that short hours are better for all concerned.

3067. Do you think that your men cut as much in their eight hours of work as men who are underground 10 or 12 hours do in other collieries?—Yes, we get more in eight hours in the district where I come from than they do in many parts where they work 12 or 14 hours.

3068. They work harder while they are about it, I suppose?—There appears to be more energy on the part of the men, and more energy on the part of the stewards, and all concerned. For instance, if a break down takes place in South Yorkshire, there is the greatest pains taken by the managers to put it right at once, because they know the men will stop at two o'clock. They appear to be more brisk, and to go about their work with a spirit that will spur them on all round, because they are all on piece-work, with the exception of a few men and boys, and each and all seem to go on with a good spirit, in consequence of the short hours.

3069. Do they ever work two turns a-day?—In very few places, which are exceptional places, but nothing to speak about.

3070. Mr. *Liddell.*] If the boys were prevented by law, up to the age of 12 years, from working at all in the mines, would they not seek employment in other trades?—Some of them would, but I do not think that the majority of them would; in fact, there is a great disposition among some of our miners now not to bring their boys up to be miners at all. There are some, on the other hand, in fact, what we term the lowest of our men, who do not care where the child goes to work, provided they can get it to bring in a trifle, nor how soon it goes; and others look at it in a different way. But some people say now that the Act of 1860 has not worked any change, because they say that the boys have been sent to work at other places. However, I have taken pains to ascertain that, and I find that it has made an improvement in the great bulk of our boys. I have reports from some of our collieries, stating that where 17 boys are employed, 14 can read and write, and where 100 are employed, 80 can read and write.

3071. You say that there is a great tendency now to employ boys in other trades than mining, consequently that tendency would inevitably be increased, would it not, if further legislative steps were taken to prevent boys going down the mines up to the age of 12?—It might have that effect with some men, but with others it would not; for instance, I have a family, and I would be very sorry to allow my children to go near the pit till they were 12 or 14 years of age, and it is not for the sake of my children that I would ask the Legislature to interfere in this matter.

3072. You are an exemplary parent; still it does not follow (and I presume you do not mean to say) that that is the feeling of the generality of the parents?—People who go into a district where the position of the miners has improved within the last few years will find that that is the feeling of a great many. But the reason why we ask the Legislature to step in here is this, that let me be ever so disposed to send my children to the school, if I wish to send them to the school till they are 14, and then send them to the mine, yet they are sufferers in consequence of others not doing the same thing, and they are exposed to danger, as their lives depend on other people.

3073. Your objection then is the danger which they incur in the mine; you do not object to their being employed in other trades?—I do not object to their being employed in other trades, still I think that when a boy is introduced into our mine so very young and uneducated we are all sufferers in consequence, because we do not really ask for the education or the short hours, or for the boys to be kept out of the pits till they are 12, simply for the purpose of educating them particularly (that is one cause of course, and one great cause why we ask these things); but we think that a child ought to have a proper knowledge of the dangerous position of the mines, because if a boy is placed even behind a trap-door, we wish that boy to be so educated and so old as to understand the position he is placed in. For instance, if he leaves the door open, or carelessly trifles with it, the air turns away, and does not ventilate that part of the mine that it ought to ventilate.

3074. General *Dunne.*] He wants more intelligence, in fact?—More intelligence, and of greater age.

3075. Mr. *Liddell.*] You want him, in fact, not

not to work in the mine till education has conferred upon him that amount of intelligence which will give him a sense of self-persuasion; is that what you mean?—Yes.

3076. Have you seen certain questions that were framed upon the miners' petition, and carefully classified and addressed to the various miners' associations all over the country?—I have seen so many of these things that I cannot particularly say whether or not I have seen that one. I have seen many questions come out at different times among the miners.

3077. You have seen the miners' petition, I suppose?—Yes.

3078. But you do not remember any questions being framed upon that petition, and addressed extensively all over the country to the different miners' associations for answer?—I have seen circulars sent out for answer to the various collieries in our own district.

3079. Have you had anything to do with replying to those questions yourself?—I believe I have replied to questions that have been put sometime back.

3080. Mr. *Foster.*] You say that the men in the South Yorkshire district generally cease working after eight hours?—Yes.

3081. And you wish all the boys employed between 12 and 14 years of age to be limited in their hours to eight hours a day?—Yes.

3082. That I suppose would compel the winding engine to be stopped at the end of eight hours, if all the boys came up and all the men came up?—We have not the control over those boys that are employed by the employers that are 14; in fact, we have not any control; the employer keeps in, as long as he thinks fit, all those, no matter what age they are, who are employed by him.

3083. But the Legislature would recognize no difference between boys employed directly by a working collier and those employed by the master of the mine?—No, of course not.

3084. Therefore, if an Act was passed limiting the employment of boys between the ages of 12 and 14 to eight hours a day, all the boys between those ages employed by the masters of the mine would have to come up at the end of the eight hours?—Yes.

3085. The men too would come up you say at the end of the eight hours?—Yes.

3086. Then that would merely leave those down who are neither boys nor men, I presume; that is to say, between the ages of 14 and 16 or 17?—Yes; if the employer wished to leave all the corves or tubs empty to commence work the next morning, they would have to be emptied by those that are over 14 years of age, and that are under him as employer.

3087. Supposing that the men's time is limited to eight hours, and that the time of the boys between 12 and 14 is also limited by Act of Parliament to eight hours, would those between 14 and 16 or 17 continue happily to work exceptionally a longer time than either those older than themselves or those younger than themselves?—As to the eight hours, it is nothing more than a temporary arrangement brought about by the power of the men themselves; the men have met together and they have agreed not to work more than eight hours; but they have not agreed, nor can they agree, that the children shall not work more than eight hours, because the employer takes them on, and they have no control at all over them; it is merely a temporary matter that we have to stand, as it were (if I may use the expression), with a drawn sword, in order to keep these short hours at some places.

3088. Who have to stand with a drawn sword?—I refer to the power of combining simply as regards the eight hours.

3089. Therefore, if an industrious man wishes to work more than eight hours for the purpose of earning more wages, there is a drawn sword held over him to prevent him?—No; because, as a rule, where the men work the eight hours, there are very few men that have a disposition to work longer; but where this rule does not exist, the employer's rule is, that the pit shall draw coal 12 hours, and the men cannot help themselves.

3090. How long does the winding engine draw?—The engine draws from six in the morning till half past three or four o'clock, about 10 hours; that is as long as the boys are employed.

3091. Do the winding engines in your district, as a rule, stop at half-past three or four?—As a rule, they do; there are some of the places where they do not, but only a few.

3092. If the employment of boys were restricted to the eight hours, in your opinion, would that compel, in most cases, the winding engine to stop at about eight hours, or shortly after the eight hours?—Yes; if all the boys between the ages of 12 and 14 were employed at this work that I have been speaking of, emptying the corves and bringing the corves to the pit's bottom, of course the pit would stand, but if the boys that were employed were from 14 to 17 years of age, those boys would empty the corves and keep the engine going until all this work was done, till half-past three perhaps.

3093. Those boys would be employed by the master of the pit?—Yes, those boys would be employed by him.

3094. Mr. *Woods.*] Then you would have one set of boys employed by the colliers as drawers, and you would have another set of boys employed by the owner of the mine, to supplement the drawers' work which had been left undone by the colliers?—No, there would be no necessity that they should supplement the others, because I do not think that there is any reason at all in the great bulk of our pits now for keeping boys in the pit after the colliers and hurriers have done filling their coals. If they commence drawing at six in the morning, there does not need to be much lapse of time before the colliers commence filling. I know some of our pits where they keep in the boys till four in the afternoon, and they do not draw coals till seven in the next morning, or half-past seven in the next morning, because they cannot commence the supply for them before that. The corves are empty when the men go down, and they have to be filled before the boys can commence again. Some of our pits stop at three o'clock in the afternoon, whether the corves are empty or not; it would, in that case, be merely leaving a supply of full corves to the next morning.

3095. Would that be inconvenient to the colliers?—The colliers would have no great objection to that; in fact, they have not any.

3096. Why, then, do they not do it always?—They have not power to do it; they have no control over the boys under 14.

3097. Who employs the boys in South Yorkshire?—The managers for the employers.

3098. Do no colliers employ their own boys?—All

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—All the colliers employ, with the consent of the masters, their own hurriers, but their own hurriers give over at two o'clock in the afternoon.

3099. If the drawer employed by the collier were limited to eight hours work, and then came up before all the coals had been drawn, when would he draw them?—He would commence with them the next morning at six o'clock.

3100. And that, you say, would not be an inconvenient plan to the colliers?—Only to very few colliers. It might cause some of them in the most distant parts of the pit not to be able to get an empty corve the next morning for half an hour or so.

3101. What is the average height of the mines in South Yorkshire that you are now speaking of?—When I speak of one mine I am speaking of all; we have some mines five feet, some nine feet, and seven, and four, and three, and two.

3102. Would it be an inconvenient plan for a collier, when he went down to his work in the morning in a thin mine, to find the place occupied with the coals which had not been sent up the previous day?—He would not find them in his place; the hurriers, before they leave off, bring them to where the horses fetch them; they are never left in the working place.

3103. You do not propose that they ever should be left in the working place?—No, it is not allowed now that full corves or tubs should be left in the working places of the men; they are brought to the pass-byes or to the inclined planes, or wherever the hurriers bring them to.

3104. I understand you to have proposed to restrict the hours of labour for the boys, and I presume the necessary consequence would be that the collier's working place would be sometimes filled with coals in the morning when he went down?—No, it would not interfere with the collier's working place at all if the corves were left there.

3105. I did not refer to the corves being left there, but to the coals not being all drawn from the place?—It would be all the same. The boys that we are speaking of are the 200 boys that are employed at horse driving, and so on; and the tubs cease to be filled at two o'clock entirely.

3106. You seem to employ in South Yorkshire a very small proportion of boys to men; about 1 in 10, I think you said?—1,700 or 1,800 boys to 10,000 men.

3107. Then it is not the rule for each collier to employ one drawer?—It is the rule for each collier to have one drawer. I may say that the great bulk of the miners take young men for hurriers in the thick beds; in the thin beds of course the boys are generally younger.

3108. Can adult men do the drawing work in a thin mine; is it physically possible?—There are some young men who do it in thin mines, but it is better for youths to do it, but not before the age of 12.

3109. Is it the custom in South Yorkshire collieries to have the whole of the coal which has fallen in a day removed from the place where it has fallen, or is it left to another day?—I have worked in Lancashire, Cheshire, Derbyshire, and Yorkshire, and I always found from experience that it is not compulsory to remove in the day all the coal that has been fallen in what we call the banks; I think they call them the shops in Lancashire. In other parts of the mine, thin mines, for instance (I have worked myself in thin mines), we never used to get more coals than we could send out in the day; we send them out as we fell them. I might have six or eight tons ready in a thin mine, but I should only bring down as many as would suit for that day, and I should leave the rest in some way made secure for the following day, or I should blow them down with powder, or wedge them down with wedges.

3110. Am I right in supposing that it is the custom to remove the coal away from the works on the day it has fallen, in order that the collier may have the place ready for him to commence working the next morning?—It is not the custom to remove the coal away, because if he gets a sufficient supply of coals out in the eight hours, it does not matter whether they are coals that have been fallen or have to be fallen; all that he has to do is to keep the empty corves going, and make the best of his place. If he sees that he can send eight tons out in eight hours he will fall eight tons if he possibly can. It is not a rule that no coal should be left in the place; it is the rule that corves should be sent out if there is any.

3111. Would it be convenient for a collier to find himself lying on his bank among coals that have been fallen the previous day?—He cannot do so.

3112. He cannot work, you mean, with fallen coal lying on the face?—He cannot work there, where the coal is; but if it is a 10-yard face he can work in another part of the face.

3113. In some coal-mines the drift is much narrower than 10 yards wide, is it not?—Yes.

3114. Then if it would not suit the collier to find the place encumbered with small coal, I presume it is not a convenient plan of working, that the coal should not be drawn out on the previous day?—In such a strait place as you refer to, coals are taken out as they are got: if a man is working in a five-foot or a six-foot place, he has less coals to get than in a place ten yards wide; and the consequence is there is less coal to come out from that place, and the corves are filled as it is got; he takes the coals away as they are loosened.

3115. Then any legislative enactment which necessitated the leaving of the coals underground on the day that they were worked, would be a disadvantage?—There is no disadvantage in leaving coals ready for the next morning, not at any of our working faces; I never found it so, at least. As a miner, I always liked to have a few ready for the next morning; it gave me a little ease to have some ready to start with.

3116. That is, I presume, in those places that are worked in wide work?—Yes.

3117. Not in narrow work?—In narrow work the hurrier takes the coals as they are got.

3118. In South Yorkshire do any of the women work at any other trade?—In Barnsley there are a few mills where the women work, but in the greater proportion of our country district, six or seven miles round Barnsley or Sheffield, there are no mills; the women are kept by their husbands.

3119. And how are the young women kept?—A few young women go out to service. I dare say the gentlemen on this Committee have heard of many Yorkshire girls coming to service.

3120. Where do they go?—They go all over the country; they go, many of them, to Lancashire.

3121. Why do they not stay in Yorkshire in service?—They go into service in Yorkshire as well as in other parts of the country.

3122. Is not there occupation for them in Yorkshire?—I do not know; there are Lancashire girls that come into Yorkshire for service: they go where they think they can be best suited, I presume; but the great bulk of the colliers' wives are kept by their husbands; and we make in our association provision for some of the widows.

3123. Then should I be wrong in supposing that those young women who go to service out of Yorkshire go because they do not find that there is employment in Yorkshire?—I do not know whether they go out of it because they cannot find employment in it; but I do know that they go into different parts of the country. There are a great many servants in the locality of South Yorkshire, but some hundreds, or rather some thousands, I should think, do not go out anywhere at all; many of them become wives very soon in our district.

3124. Mr. *Ferrand.*] You say that all the colliers in your neighbourhood have continued to work eight hours a-day?—That is the understanding among them, that they will work eight hours.

3125. But is there any combination among them, or have they entered into a written agreement?—No, we have no agreement at all; it is simply that we have met and said that we adult miners will restrict our hours to eight hours per day.

3126. Then the general rule in your neighbourhood is that the colliers work eight hours per day?—Yes.

3127. Do they allow other colliers, if they think proper, to work a longer period?—There are some few that do work longer periods; and I may say that it is not well liked by the men that work eight hours, to see others working 12 or 14 hours.

3128. Then I understand you to say that the men who have entered into an arrangement to work eight hours, do not like other men to work longer hours?—They do not like it; but still, they have no rule to interfere with them.

3129. Have they interfered with them in your neighbourhood?—I am not aware that they have interfered with them for working longer hours.

3130. How much do you on an average earn in eight hours?—I believe we earn more in eight hours now than we used to earn in 12. It is very difficult to average the earnings. We have had disputes in the district, and we have tried to cast the average. Sometimes we have averaged them to 4*s.* 6*d.* per day, and sometimes to 4*s.* per day, and so on; but there is so much difference in colliers' earnings, that it is very difficult to get at their average earnings. We may take it at 25*s.*, or 26*s.*, or 27*s.* per week, perhaps.

3131. For eight hours' labour per day?—Yes.

3132. What were the wages, on an average, with the 12 hours a-day?—I do not think they were more than 20*s.* a-week, or a guinea, from my experience. I once averaged mine for 12 months, when we were working long hours, and I did not average more than 17*s.* 6*d.* per week.

3133. At that period did you receive the same wages, for getting a certain amount of coal, as you do now?—At that time it was very difficult to come at our wages, even at a fixed price. We were supposed, at that time, to get our coals paid by measure, so many corves to so much money, and these so many corves and tubs (say 20), should contain such a weight, and for that scorage there should be such a weight at such a price; but we had no means of ascertaining the true quantity of it, and therefore we could not well get at our true wages.

3134. Without going further into that question, I understand you distinctly to state that you now, as a body, are earning more wages, at eight hours a-day, than you did formerly at 12 hours?—We are, as a rule.

3135. What is, generally speaking, the manner in which the men employ their time after they have finished their eight hours?—There are some of them that employ their time very well, and there are others that do not. I believe that South Yorkshire is one of the best districts that ever you can come across for the respectability of the men. A great many of the men will read, and a great many of them will work in their gardens, when they have had a couple of hours' rest after coming home. Some of them will buy a bit of land, as soon as they can, as freehold, and occupy their time in that way.

3136. You say that a great many of the men read; do you find that the educated men employ their time properly, and to their own advantage, and that the uneducated men, as a body, drink and spend their time improperly?—I do; I find that to be the rule.

3137. Do the colliers, as a body, wish their children to have a better education than they now enjoy?—The educated portion of the men wish that to be done. It is not that the body of the miners are educated, but the majority (in fact I may say all the educated men that have learning something similar to myself) wish for education to be enforced by Act of Parliament. There are others that are reckless and careless as to their children's condition.

3138. The majority wish for education to be continued, and to a greater extent than it is now?—Yes; to a greater extent than it is now.

3139. Mr. *Clive.*] You have stated that you earn now as much in eight hours as you formerly did in 12; how far back do you take that date?—Since 1858, about seven years.

3140. With respect to that, what rise has there been in the wages according to the weight?—We have not had many advances in wages, but we have secured our wages by other means; we have got privileges and better regulations, so far as giving us weight and other things go. We have had better facilities to get our work out of the pit, and so on, than we had when there were long hours. We found in the long hours that a great many appeared to be very slothful, and careless, and sluggish; and the miners, being on piece-work, could not get their work out as they ought to do.

3141. *Chairman.*] When the miners made the arrangement by which they got their hours reduced to eight, did they attempt to get the same arrangement for the boys?—Yes, they attempted it.

3142. Did they propose it to the masters?—There has been many a deputation from the men to the employers to request that the boys should give over their work at the same time with the men.

3143. Most of the boys are sons of miners, are they not?—Many of them; not all of them.

3144. The miners, of course, could prevent their boys from going down if they chose, whether they are employed directly by them,

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or whether they are under the employment of the manager?—There are some miners who have not their boys working with them till they are 17 or 18.

3145. But whether working with them or not, if working at all, they are working with the permission of their parents, are they not?—Yes, they are.

3146. It is open to the miner to say to the manager, "You shall not have my boy if you keep him more than eight hours"?—Yes.

3147. The miners never have done that, have they?—In some instances they have; but other miners do not care if they can get their boys into the pit before they are 10.

3148. There has not been the same general movement to reduce the hours of the boys as there has been to reduce your own hours?—We could not effect the eight hours for the boys without a great deal of contention and many strikes, perhaps, and many things of that description. I am speaking of those who are in the immediate employment of the master himself.

3149. Supposing that all the coal was cleared out and drawn at the end of every day, how long would it be the next morning before there was any coal ready to be drawn?—At most places it would be an hour; when all the coal is emptied in the evenings, at most of our pits it is an hour before they can commence drawing the next morning, though all the men are down before six. When they take the full corves from the pass-byes, or the various places where the hurriers bring them, they take a supply of empty ones; if they bring six full ones, they leave six empty ones there.

3150. So that if the boys went down an hour later and stayed an hour later, they might, without working more than eight hours, draw away all the coals?—Yes, they might do it in that way.

3151. Mr. *Woods.*] What reason did you assign just now for your getting more money without an increase in the scale of wages; how is it that you can now earn as much in eight hours as you used to earn seven years ago in 12 hours?—The explanation, which will be as near the truth as I can give it to you, is this, that when we were working 12 hours there was no system of weighing the miners' material, or measuring the miners' material. There was no system at all in 1858 by which we could get at the true quantity of coals sent either by weight or by measure, although we were supposed to have so much per score of 20 corves, or so much per ton. But since the Act of 1860 passed, giving us the privilege of the material being truly weighed, we have found such a difference at the end of the fortnight, or the end of the day's work, that it really has augmented our wages, by our getting at the true quantity. At the Wharncliffe Silkstone Colliery, where I was working when this Act of 1860 came into operation, we were supposed to have so much per 20 corves; and I remember that when the weighing principle was established, it considerably raised the pay, in consequence of our getting at the true quantity of coals sent up by the miners. It augmented our wages, also, in another way; when we were working long hours, if we had a break-down in what they call the engine-planes, or self-acting planes, and so on, there did not seem to be any one there that appeared to be the least anxious to get the repairs done, in order that the work might go on. I have known cases where we have waited an hour or two hours about such a thing before it has been made secure again. One consequence of reducing the hours of labour has been that each and every one in the employment of the masters, that is to say, deputies and so on, have used more exertion to get break-down set to rights soon, so that the work might come out quicker. They used to say this: "Oh, the miners will work it up by stopping 12 or 14 hours;" but when we came out in eight hours, then the exertion was greater and the difference was made up. Every one seems to try to get out the work sooner, because the hours are short, and there is less sluggishness about it.

3152. Are there any men working eight hours a day now who are earning eight or 10 shillings a day?—We may, perhaps, have a few men working at piecework that are getting eight shillings a day; we have some that are in very good places. That is always the case in every district where I have been, that there are some better placed than others. And there is a great difference in the men. Some men will almost leave their heart's blood in the place to get an extra shilling or two; they will work till they can hardly walk home in order to get a few shillings extra; while others will take it easier and not get so much. There is a great difference both in places and in men.

3153. Do you think that there are any men earning that amount working at the Oaks Colliery, Barnsley?—Yes, I dare say. I have found, from my own experience, that I could earn eight shillings in eight hours for a week or a fortnight, or perhaps a month together; but probably, at the very same working place, I have found that, as it has extended and gone further off, it has come so that I could not get sixpence an hour.

3154. But when a man finds his wages change by reason of the work changing from a shilling an hour to sixpence an hour, does he go on working contentedly at that, or does he ask for more pay?—He may ask for more pay sometimes, but he does not often get it. I have myself worked 12 months together, in hopes of the place becoming better, and not had a penny remuneration. Some men think that in three months it will be better, and they stick to it on that account. Sometimes the employers will pretty readily give an advance, but others will not.

3155. Has there been any increase in the rate of wages on the South Yorkshire coalfield since 1858?—I do not know that we have had any general advance until latterly, within this last few months when we have got five per cent. advance throughout the district, or nearly so.

3156. The difference between eight hours and twelve hours work, with the present wages, seems to me a large per-centage to be produced solely by the improved management of the colliery?—Yes, it is; but we can actually prove that some of our places have drawn that much more coal in eight hours than in 12.

3157. Has there been any great change in the rate of pay in Lancashire, where there has been no alteration in the system adopted?—Yes; I believe that in Lancashire (though I have not worked there since the changes that I speak of took place) there have been several advances on the price of the workmen without any change of system;

system: but I cannot say what difference that has made in their wages.

3158. Do you think that there has been on an average three times 10 per cent. in the last seven years?—There might have been on the prices; I do not know what it has been on the wages.

3159. But the mines have not altered in that time?—I dare say they have.

3160. Of course there is some affinity between the wages in Yorkshire and the wages in Lancashire in coal mining?—I think that if the system was in vogue in Lancashire that is in vogue in South Yorkshire, the wages would be something like as good in Lancashire as they are in South Yorkshire, if not better.

3161. Then there is an affinity between the two?—Yes, I believe so.

3162. Then if there has been an advance of something like 30 per cent. in Lancashire, probably there has been something like a corresponding advance in Yorkshire?—No, not directly on the prices; we have very few collieries in South Yorkshire, but where the prices remain as they were seven years ago, with the exception of this five per cent. that I have spoken of latterly obtained.

3163. *Chairman.*] Do I rightly understand you to say, as to wages, that the reason why you get as much for eight hours as you used to get for 12, is partly that you work more vigorously during the eight hours, partly that you get more fairly paid for your work, and partly because from the arrangements of the mine you are enabled to produce a greater quantity in the same time?—I believe that every arrangement is better, that the men generally, both those more particularly employed by the masters and the colliers themselves, and all concerned, are more vigorous, and everything appears to be kept going better where they have the short hours. A boy works more vigorously when he knows he can get out at two o'clock, than when he must stop in till six or eight.

3164. Has there been a general increase of wages in other departments of labour, besides collieries, in South Yorkshire during the last seven years?—There has been some slight advance, I believe, in other branches of business in South Yorkshire.

3165. The system in your district now, is to pay by weight, is it not?—Yes, that is the principle.

3166. How long has that been so?—They were supposed to pay by weight, before the Act of 1860, but since the Act of 1860 came into operation, they do pay by weight.

3167. That is to say by weight, estimated according to the supposed size of the corve?—Yes, they used to pay in that way.

3168. The price paid to colliers for the corve was always supposed to be regulated by the weight of the coal in that corve?—Yes.

3169. But now the weight of the coal is actually ascertained by weighing it?—Yes.

3170. When was that change made?—We commenced making the change and getting the principle of weight established in 1859. I was put on the bank of the Wharncliffe Silkstone Colliery, in 1859, to see that the actual weight was secured to the miners.

3171. When did the masters agree to have the coal actually weighed?—They agreed in 1859, after we had been locked out for some time.

3172. That was one of the points that were established in consequence of the strike, was it?—In consequence of 28 weeks' contention between the employers and the men.

3173. Do you find that the weighing takes much time?—No.

3174. Does it delay the work at all?—Not in the least.

3175. Since the system of regular weighing has been adopted, you have been put at the pit's mouth as an agent for the men, as I understand you?—Yes, I have been there for five years as check weighman.

3176. Was there any difficulty thrown in your way by the managers?—Yes, difficulties were thrown in my way several times.

3177. Did you give satisfaction to the workmen?—Yes.

3178. Did you give satisfaction to the managers of the colliery?—Not at all times.

3179. What happened in consequence; was there any attempt to remove you from employment by the workmen as check weighman?—Yes, in 1863 there was an attempt of that kind.

3180. Will you explain to the Committee what that attempt was?—I was checking the men's accounts at a pit called No. 1, Silkstone Mine, and they turned the men's workings, or rather the men's tramways or hurry-ways over to a pit, No. 2, and sent their coals out of No. 1 to No. 2.

3181. Did those pits, Nos. 1 and 2, belong to the same colliery?—Yes, they were pits belonging to the same colliery and the same employer, one being the downcast and the other the upcast. No. 2 was the upcast, where the coals were sent to from No. 1 in order to come out, and I was engaged at No. 1. The men said to me, when their coals were turned from pit No. 1 to No. 2, "You must go and check our accounts there as you have done at pit No. 1." Consequently I went to pit No. 2. The manager ejected me from the weigh-house entirely, and said that I had no business there; that I was no longer a check-weighman for the men, and I must go about my business.

3182. Mr. *Bruce.*] Was there a check-weighman at that pit, No. 2?—No, there was no longer a check-weighman there. There had recently been a check-weighman, but he had been ordered to go to another pit.

3183. Do I rightly understand you that all the coals were transferred from No. 1 to No. 2?—All of them were transferred from No. 1 to No. 2.

3184. And that being the case, the managers would not allow you to go from No. 1 to No. 2?—No. They said I must go about my business, and that I was no longer allowed to be there. We took a summons out, for their interrupting or impeding the taking of the accounts of the men.

3185. *Chairman.*] A summons against whom?—Against the manager who ejected me. The magistrates decided that I was legally appointed. The arguments raised against me were, that pit No. 1 was finished, and that the Act says that the men can have a check-weighman provided that he is working in the mine or colliery for the time being. I was placed there in 1859, and the Act only came into operation in 1860, after I had

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had been placed there; and the argument raised was that I had not been appointed under the Act of 1860, being there before that time. Another thing said was that pit No. 1 was finished, and that pit No. 2 was a different colliery altogether, and that therefore I could not check the men's accounts.

3186. What was the decision?—The decision of the magistrates was that I was legally appointed. They did not impose any fine upon the manager; they simply gave me costs.

3187. Did you get paid those costs?—No, I did not get paid any costs at all; they refused to pay costs, although they were levied upon them. I went back to pit No. 2, to go to the work again, and was ejected again. In fact, I was ejected six or seven times.

3188. You were ejected after the decision of the magistrates deciding that you had a right to be there?—Yes; and I took out a summons again, and the magistrates decided again that I was legally there. I was ejected again, and I went again, and was again ejected; and then we took out a warrant for the costs, but it was not executed because they issued a writ of *certiorari*, and brought it to the Court of Queen's Bench.

3189. After you had got a second decision from the magistrates they ejected you again?—Yes.

3190. And then you took out a warrant for distress for the costs?—Yes.

3191. That was removed to the Court of Queen's Bench by a writ of *certiorari*?—Yes.

3192. What became of it in the Court of Queen's Bench?—It came on for hearing in the January Term of 1864; it was on about an hour before three or four of the judges, and it was adjourned for a fortnight; Sir FitzRoy Kelly, and Mr. Cleasby and Mr. Maule were our counsel. As I say, it was adjourned for a fortnight, and in the course of that fortnight I saw Sir FitzRoy, and he suggested that it would be much better to make a certain proposition to the other counsel; and I asked him what that proposition was, and he said, "The clause is so loose" (that is, the weighing clause) "that I think we had better make a proposition to something like this effect, that on condition that they permanently re-establish you at the weigh-house of No. 2, you will pay your own costs." And of course, on those conditions, I said, that we would leave it in his hands, and the other counsels' hands, and if they thought that that would be the best, they must do the best. So that we made the proposition that we would pay our own costs, on condition that I was reinstated permanently. It was his opinion, he said, that the Act being so loose they could get rid of me in a fortnight's time, by giving all the men notice, and saying that I was no longer in their employ. The judges made a note of it, that if anything arose for three months after I was reinstated they would give the employer power to raise the question again, but nothing arose, and of course the question was never raised.

3193. Then you were permanently reinstated?—I was reinstated until I came into the position in which I am now.

3194. After you were reinstated were there any difficulties between you and the employers, or managers, at all?—No; I was more comfortably placed there for those twelve months that I was there, than ever I was before.

3195. Were there any differences of opinion between you and the employers as to the weight?—No differences at all.

3196. It went on smoothly and satisfactorily?—Smoothly and satisfactorily, better than ever it had been before, although I may say that I was seven months from the weigh-house, No. 2, entirely in consequence of this case going on. It cost the miners something like 300*l.* before I got back again.

3197. General *Dunne.*] How long since was that?—In 1863, and it was decided in 1864.

3198. *Chairman.*] As between measuring and weighing, what is your opinion?—My opinion with reference to weight is, that it is the only just way in which to get the true quantity of coals, either for the employer or for the employed.

3199. Is that the general opinion of the workmen?—It is the general opinion of the workmen in South Yorkshire, and in a great many other parts as well, that the only true way of getting at the true quantity is weighing it.

3200. Mr. *Bruce.*] Do they measure in South Yorkshire as well as weigh?—Very few do; there are some few collieries where they measure, but the men are dissatisfied with the measuring.

3201. Are there any deductions made in your district on account of insufficient weight?—No, there are no deductions at all where the weighing principle is established, We have 30 collieries in the district where the weighing principle is established, and we have 30 check weighmen.

3202. How is the coal raised; in what sort of tubs?—They vary from 4 cwts. to 10 cwts.

3203. The men are paid on the actual quantity they send up?—Yes.

3204. If a tub should hold 10 cwt. and a man sends up six he is paid for six?—Yes, he is paid for six; it does not matter what the tub contains, he is paid for it.

3205. Is any deduction made on account of the state of the coal that is sent up, for its containing any dirt or any shale?—At a few of the places there are forfeitures made for dirt, and sometimes forfeitures for what we call bad riddling; that is to say, slack supposed to be put wilfully into the coal; but we have not so many deductions for those as we used to have. In some collieries we have not had as much as 10 cwt. deducted in 12 months. There are deductions made at some of the places, but not so much as there used to be. We do not approve of deductions being made, either for dirt or for bad riddling.

3206. Do you think that it is not right to make deductions if a man sends up his coal mixed with shale?—We say this, that it is very difficult to keep the coal clean at all times, and we say that if a man wilfully puts slack or dirt into his coal the employer has the remedy in his own hands; he has no occasion to employ the man. We find that where there is less deduction there is less need of forfeiture, and the more deductions the more cause there is for them.

3207. In the case which you just now mentioned to us, which was carried by *certiorari* to the Court of Queen's Bench, the doubt seems to have been whether the coal carried up from No. 2 pit was not altogether from new workings, and therefore whether that did not constitute a new colliery. That was the question raised, was it not?—That was the question raised, but it was a well known fact that the men never changed their working places.

3208. The advice given by Sir FitzRoy Kelly was grounded, as I understand it, upon this reason, that it was competent to the masters to put an end to the working for a fortnight, then to call in a new set of men, and by that means to exclude you or any man not called in, from a position as weighman at the pit's mouth?—They said the pit was entirely finished. One of the employers himself came to me about two days before the pit was stopped.

3209. What were the grounds of Sir FitzRoy Kelly's advice to you?—The advice of Sir FitzRoy Kelly was, that as the men were wanting me back again badly, I should agree to his proposition in order that I might be permanently reinstated.

3210. What alteration in the existing law would you propose in order to prevent such disputes as you have mentioned?—We think that the men should have power to appoint their own check weighman; as the Act now is framed, it says that he shall be working in the mine for the time being, and we think that that is a great injury to us; we think that they ought to have power to bring the man from any place that they choose who is most competent to serve them, and that the employers should not have power to interfere with him, except it can really be proved that he is a dishonest man, or something of that description.

3211. Would you be satisfied with that change in the Act?—No, we think that it ought to be put under the weights and measures system; there are two disputants as the case stands now, the employer's weighman and the men's weighman, and there is nobody to decide the point in difference between them.

3212. The Act enacts that the coal shall be justly weighed; if you could prove that it was unjustly weighed, the masters would be subject to a fine, would they not?—If a proper interpretation was given to the clause, I believe they would be subject to a fine if they did not properly weigh it; but the difficulty is to get at the improper weighing.

3213. Would not a magistrate require evidence to be given to him as to what the weights were, and what the weighing machine was, in order to see whether the workmen got their due?—He might require that; but still there would be nobody to furnish that information except the employer's weighman and the man's weighman, because no other person is allowed to go near the pit's bank without the permission of the employer; for instance, the inspector of weights and measures cannot go near the pit's bank (we have applied to him many times) without the permission of the employer.

3214. You would suggest then another change in the Act, namely, that the weighing machine which is used should be inspected by the inspector of weights and measures?—That is what we ask.

3215. Is there anything else?—And that the men should have power to appoint their own weighman. I do not know that there is anything else that we wish. As far as the Act goes it acts very satisfactorily to us, but it does not go quite far enough.

3216. Mr. *Liddell.*] Do you distrust the accuracy of the weights?—Sometimes the accuracy of the weights is disputed.

3217. Will you name any particular colliery in which the weights used at the pit's bank are distrusted by the men?—We have had a dispute going on at one of our collieries, where there are 500 men employed; it is a limited company at Masborough, near Rotherham.

3218. Will you name the pit?—It is called the Low Ground Colliery. There has been a dispute going on there for some time in consequence of the weighing. They disputed the tare weight of the empty corves, and they also disputed the weights of the machine itself, and the men were just on the point of striking against it, when the manager sent for the inspector of weights and measures, and on account of his sending for him, he went. The consequence was, that he found the weighing machine wrong very nearly a cwt. per corve; a 10-cwt. corve only weighed nine before he came, whereas it weighed 10 cwts. when he put the machine right; that happened latterly, not many weeks ago.

3219. Then I understand, with regard to weighing, that on the application of the men, the master consenting to have the machine examined, the machine was found to be wrong?—Yes, the machine was found to be wrong.

3220. And the complaint of the men, therefore, was found to be just?—Yes, but it was very near a strike; I do not know how it was escaped, but it was escaped. The next dispute was after the weighing machine had been put right, on the question of having the empty corves properly adjusted. There are several sorts of corves, some light ones and some heavy ones. The men wanted all the empty corves marked and weighed, and the weight put on them as they are on the railway waggons. The master refused to put the tare weight on each empty corve, but he agreed to adjust the empty corves, and to take the tare of all of them, one with another.

3221. What is the meaning of the word "tare"?—The net weight of the empty corve in itself.

3222. We have dealt with the first complaint of the men, and now this is the second complaint that they made; and in the case of this second complaint, it was also proved that the complaint was well founded?—Yes; but it is not satisfactory yet, even in regard to the second complaint.

3223. Because you have no power of compelling the master to remedy the evil complained of?—No, we have no power; all we want is, simply, to have true weights, true weighing machines, and the empty corves duly weighed before the coal is put into them.

3224. And you think that if the law required the inspector to examine and test these things himself, then these complaints would not arise?—They would not; I have been a check weighman seven years, and the weighing principle is satisfactory with the exception of such points as I have referred to, and if a provision was made to compel these things, I believe there would be less contentions and less strikes, so far as relates to getting at the true quantity of the coals sent up by the men all over the country.

3225. Do the masters object to these powers of examination being given to the inspector?—We have applied to several employers for permission to take the inspector of weights and measures on the pit's bank to inspect the weighing machines, and they have refused us: inspectors cannot go without permission.

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3226. Do you mean to convey to the Committee that in all cases where that permission has been asked for it has been refused?—Not in all cases, but in some.

3227. Could you name the case, or any cases, in which the permission has been refused?—The permission has been refused in a case that we had at Thryburgh Hall. There the men were on strike not long ago for nine weeks, in consequence of a dispute about the tare weight of the empty corves, and then the employer allowed some one to go on the pit's bank to examine them, and the men went back to work. There have been several cases in which the inspector has been applied for, and has gone; but somehow or other if he has put the weighing machine right, the corves have also wanted putting right, and in some cases disputes still exist in consequence of the dispute on the question of the tare weight.

3228. Mr. *Foster.*] Are the weights taken by means of weighing machines?—Yes, there are proper weighing machines, something like the railway waggon weighing machines, only of a smaller description; they are made suitable for the corves.

3229. And that is the usual mode of weighing the coals in the South Yorkshire district, is it?—Yes.

3230. Has the weighman the power of testing the accuracy of these weighing machines?—He has not power without permission from the employer; not at all places. At some places the employers deal better with us than at others; some of our employers will have weights on the premises, and the check weighman can put them on when he thinks fit; but others have no weights about for the purpose, and sometimes the weighmen do put them on themselves. Sometimes they have to ask the employer to put them on, and sometimes he will and sometimes he will not. But we have many a dispute arising as to getting the true weight of the empty corves; that is a great obstacle in our way, because if we cannot get the true weight of the empty corves, we cannot get the true weight of the coal. The rule is in many collieries to adjust the empty corves every two months.

3231. Do the masters weigh every corve in those cases, and have it marked?—Where they are all nearly of one size they would strike the average, perhaps; it would be better if they were marked.

3232. With respect to the miners nominating their own weighman, which you said they generally desired to have the power of doing in the South Yorkshire district, should you recommend that a man discharged from the colliery for what the employer might consider misconduct, or from being a mischief-maker, should be employed on his property without his will or consent?—I admit that that is a very delicate point with some of our employers. It is very difficult at times to tell a mischievous man; they termed me a mischievous man; and the judge at the Queen's Bench asked them what they had against Normansell, and the counsel said, "We have nothing against Normansell, only that he is the leader of a large combination at the colliery, that is all;" and I do not presume there is any mischief that any weighman would be able to do if the Act properly defined the thing, and his duties were properly set out. I do not see that he could interfere with that matter at all. We have not the power to make mischief, and we do not desire it.

3233. To revert to the question of a man discharged for any cause from a colliery, would you wish that such a man might be reinstated at the pit's mouth against the will of the owner of the mine?—If the men could not bring a man there to check their accounts who they thought would be a suitable person for them, it would be very little use, because the employer may inspect the man, and have a say in the thing, and they would have no confidence in him at all. I presume it would be a great hardship upon the men, unless I had done something wrong, if they could not bring me back to check their accounts, because the employer said that I had worked at the colliery and got discharged.

3234. Would you allow the master the privilege of objecting to the nomination of a man objectionable to him?—I have never seen one case where it would come to that; but if we allowed the employers power to object, of course we should never get one to suit as I think.

3235. Would you allow the employer to have no voice whatever in the matter?—No; only if the man misconduct himself and really impeded the working without a cause, then I should allow the employer to say something. But if the man simply attended to his duties as the Act described, I do not think that the employer should be allowed at all to interfere with the man, except in a case where the man interfered to stop the working. As it is now, the Act says that we are not to interfere with the weighing, but if we are not to interfere with the weighing we cannot get true weight.

3236. I do not think you quite correctly interpret that clause in the Act, it merely states that such persons shall not be authorised in any way to impede or interrupt the working, or to interfere with the weighing, measuring, or gauging?—There are very few people that can interpret the clause.

3237. What alteration would you suggest in the law?—I have no objection to say that the weighman should not interfere with the drawing of coals out of the pit, or with the working in that description, but I think he should be allowed to interfere with the weighing.

3238. In what way?—In this way: say that we have the weighing machine here, and that I am set here as the men's weighman, and that another man is set there as the employer's weighman (*describing it to the Committee*)—a corve of coal, of 10 cwt. say, comes on the machine—as the Act now stands I am not allowed by the employer to touch the machine, I am simply to stand there and take what the other man likes to weigh it to, as being truly weighed; I say to the checkman "Weigh it again, it is not truly weighed;" he will not perhaps, and so I have proved it to be by experience. I have no objection, and no other man would have any objection to the men's weighman not interfering, so far as the working of the mine is concerned, but I think that so far as weighing is concerned, he ought to be allowed to interfere.

3239. Have you taken any further notice of an occurrence of that nature?—I have seen a corve of coal stand two hours on the pit's bank; I have stopped it from being tipped over; I have remonstrated with the other weighman, and asked him to bring it back and weigh it again, and probably

probably it has weighed a hundred weight more when it has been brought back and weighed again, than when he weighed it before. Now the Act merely authorises the man to take account, and nothing more. We want the Act to say that it shall be truly weighed, and not merely that, but that the check weighman shall see it truly weighed.

3240. Are these instances of incorrectness to which you have alluded, in your opinion, wilful inaccuracies or such as result from careless weighing?—Sometimes they are wilful, and sometimes they are not. I have seen (if I may be allowed to explain) the manager of a colliery come into the weigh-house and say, "Now, we were short weight so many hundred tons last month, we must have more weight." Well, the man whom he has employed and placed there to see the coals weighed for him, has no other means of getting more weight but to let the thing slip and keep the beam as heavy as he can, and the man is actually spurred on to make the weight as much as he can.

3241. You would in an article like coal, I suppose, think that a full and adequate weight should be given?—True.

3242. You would not wish to see coal weighed as you see sugar weighed, by the pound?—No, nor as we see tea either. We always give them a good draft. I think that the weighing principle is more in operation in South Yorkshire than elsewhere, and the nearest point that we weigh the coal to is 14 lbs. If it weighs 13¾ lbs. we do not get anything for that draft; all under 14 lbs. is given at the present time. In some other places the employers, if it weighs 27 lbs., that is, a pound short of a quarter of a cwt., take the 27 lbs., and the miner, if it does not amount to 28 lbs., does not get the 27 lbs. We do think it a hardship that when a corve comes out 6 cwts. 3 qrs. and 27 lbs., we should only get 6 cwts. and 3 qrs. for it. In some places we have had disputes in splitting this quarter of a cwt. In some cases they say, "If it weighs 15 lbs. we will give you 28 lbs., and if 14 lbs. or under, we will give you nothing." In other cases, if it is 13 lbs., they say, "We take it; if it is 14 lbs. we give it to you." In some of the places there are thirty full corves or tubs put into a railway waggon to make a 7-ton or 8-ton truck, and we have given thirty drafts, perhaps, to fill the truck every time. We always give weight every time.

3243. You spoke of as much as 100 tons being deficient?—That is what the manager says, but we could give you a case in point where we could prove that that did not exist. The manager has come to the weighman and said, "Now, we must have more weight;" and there has been an average taken of everything that has come out of the pit for a month together, and it has been proved to be weight into their hands instead of out of it. We have instances of that description where we have taken the trouble to test it, and have found it to be so.

3244. What further power would you wish given to you as a weighman than this Act provides?—I think it would be no injustice to the men, and no injustice to the employers, that they should be put under the Weights and Measures Act, and that the weights should be inspected by the same or other inspectors, and that they should be punished according to the present Act, if they were found deficient or wilfully cheating the men, somewhat similar to the way in which the shopkeeper is dealt with. I would deal with it in such a manner as that; and also I would provide that the men should be allowed to appoint their own man, and that the employer should not interfere with that at all.

3245. In what manner should the interference with the weighing, or any mode you can suggest of further checking the weight be carried out?—There is no further check to be carried out than I have already suggested.

3246. You said, as I understand you, that you had not now a sufficient check at the moment of weighing; and that you wanted some further power to interfere at the very moment of a corve being weighed. How would you propose that what you suggest should be carried out?—I think that if a corve is brought to the employer's weighman, and he refuses to weigh it as he ought to weigh, he should be punished accordingly.

3247. But does not the Act provide that already?—No.

3248. Would not that refusal be infringing the Act; would not the man be liable to a fine or the owner of the mine be liable to a fine, under the Act?—Now they cannot get at the point, for this reason: I dispute, say, a corve of coal being truly weighed, and it is tipped over before I can have it weighed again. All I should want would be a power, if I disputed a corve of coal, to have it set aside for some other authority; that if the two weighmen could not agree among themselves, then the check weighman should have power to retain that corve of coal until the dispute could be settled. We do not want it to be ripped away by the man on the pit bank and tipped into the screen at once. They say that there is the Act for us, and that we can sue for the difference. But we cannot sue for the difference, because we do not know the difference.

3249. Mr. *Woods.*] There seem to be some differences even about weighing. Supposing now that you had measuring in Yorkshire; supposing, for instance, that you had been paid by the waggon in Yorkshire, would it have been visible to the eye whether the waggon was full or not?—No, it would have been visible if it was not full, but it would not have been visible enough to take it from the man because it was not full. The weighing principle simply gives weight to employers and employed, the measuring does not; you can never get at the true quantity of coal by measure. The easiest and truest way is to weigh the material truly.

3250. *Chairman.*] What do you mean by what you say about its being visible?—I mean this; supposing it should be 6 cwt., a man with the naked eye may say that it is not 6 cwt., but he does not know.

3251. You mean that it is visible to the eye that a corve is not full, but that it is not visible what the weight is?—Yes.

3252. Mr. *Woods.*] In some parts of England it appears that they pay by measurement, and in others by weight. My question was directed to this; if a man contracted, as you say they do contract in some collieries in Yorkshire, to send up a certain number of scores of waggons, if one of those waggons came up not full, I suppose the justice man could see that it was not full?—The justice man on the part of the men, and the justice man on the part of the employers, could say that it was not full, but they could not say

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that it was not weight. We have seen scores of corves come out that have not been full, and that have been certified to as not being full, but as soon as they are put on the machine they turn out to be weight. Perhaps the coal is of a heavier nature, and so it is weight notwithstanding.

3253. If the contract was to fill a waggon the weight has nothing to do, I apprehend, with the question whether it weighs heavier or lighter. If the contract was to fill a waggon, then if it was not filled, of course the man would not have completed his contract?—If the contract is that he is to get so much by measurement, and if the waggon has nothing to do with weight, of course it is a different thing.

3254. The question put to you was this: if a collier contracts to fill a waggon, it is very easy for the justice man to see whether it is full or not, is it not?—It is easy to see whether it is full, of course; but I am not aware that there are any such contracts made as that without weight being attached in some way to it, although it is not weighed. When we got by measure at the place where I was working, I have seen as many as 20 tons a day forfeited for the tubs not being full enough. And now, instead of any forfeiture for short weight, we produced in twelve months no less than 14,000 tons over and above the given quantities that the corves were supposed to contain.

3255. Where was this?—At Wharncliffe Silkstone colliery, near Barnsley; the colliery of Jeffcock and Company.

3256. General *Dunne.*] Therefore the men were not paid for those coals; is that what you mean?—I say that when we got them by measure they used to judge them by the naked eye and say, "This is not full enough;" and I have seen as many as 80 corves or tubs forfeited in one day for short weight, that would be about 20 tons at that pit, and I have known cases where that has been continually going on for months and months together, until we got the weighing machine established, and when we got that placed on the pit hill and some one to attend to it, instead of having any forfeitures for short weight, in 12 months' time after the principle was established we could show over and above the measure, 14,000 tons overweight.

3257. Mr. *Woods.*] Over and above what those waggons had been assumed to amount to?—What we were paid for; we used to send 20 corves, 5½ cwt. each.

3258. You mean that the bargain was that they should be 5½ cwt. each?—Yes, that they should be 5½ cwt. each, to be full.

3259. Was the bargain that they should be 5½ cwt. each, or that they should be full?—The bargain was that if they were 5½ cwt. they were full, and if they were not full there was not 5½ cwt. in each of them.

3260. I think you said that after you had settled your dispute in the Court of Queen's Bench, and settled it, as I understood, without any decision, the thing worked very satisfactorily?—It did as far as I was concerned.

3261. Of course, then, no deductions were made as to short weight?—No, nor before that were there any deductions for short weight.

3262. Were any deductions made because the colliers negligently sent up more dirt or slack in the coal than they had contracted to do?—Yes, there were a few; and there were some that I did not object to also.

3263. Were those many?—Not many. In 700 or 800 tons a day there would sometimes happen to be a ton sacrificed, and sometimes none.

3264. Still that question was an open question, and weighing could not settle the question, whether a tub was dirt or no?—No, weighing could not settle that question at all.

3265. General *Dunne.*] Is the amount to be deducted weighed?—When a forfeiture is made they always allow a little, because it is a thing impossible to keep coal clean; but if they think that it has come from a reckless and careless fellow who has filled the tub recklessly, a good many of them say, "Here, do you call this right?" we perhaps say, "We do not." Then the weighman for the master says, "I will take a cwt. from this."

3266. You estimate the deduction, in fact?—We just jump at it; the manager, perhaps, will set that corve on one side on the pit heaps, till the man comes out and the employers give him a reprimand. We lately made an agreement at one of our places, on the Thursday before Good Friday, that if a man sent dirt out over and above what they considered amounted to carelessness, it should be placed on one side for all the men to look at when they came up, and that he should be reprimanded or cautioned; and that then if he sent another up he should be suspended from labour. Instead of taking the corve and anything that there was in it, the employer agreed that he would suspend the man.

3267. Mr. *Woods.*] You describe the working of the system as having been satisfactory, I believe, after that decision in the Court of Queen's Bench?—Yes, as far as my own individual self was concerned.

3268. You were established there?—Yes.

3269. If it was satisfactory what necessity is there for further powers in the Act?—I have already said that the Act, so far as it goes, is satisfactory to us, and I said that so far as my being placed there again went it was satisfactory to me. I have not shown that the Act is satisfactory in itself, but so far as it goes it is.

3270. There has been a great deal of dispute, you say, at various collieries in Yorkshire about the tare, the empty weight of the waggon; I suppose that the down-casts are often wet, are they not?—Some of them are.

3271. If the waggons remained in the wet they would vary very much in weight?—Yes.

3272. And if the waggons went up and down the up-cast pit, and up and down the down-cast pit indiscriminately, if one was wet and the other dry, they would be made to vary by that means in weight even if the weight was written upon them, would they not?—Yes; but if it was a down-cast shaft, and it was continually wet, they would be weighed wet, and if it was dry they would be weighed dry.

3273. It is within my knowledge that some collieries have tubs going indiscriminately up and down the two shafts, are you aware of that fact?—It happens so at some collieries, but I have already said that where the corves vary so much in the tare-weight in consequence either of the water or anything else, we adjust them so much oftener. At some places they adjust them every week,

week, and at others every two months or three months.

3274. I suppose that when corves are patched and repaired they differ in weight from new ones?—Yes, they do, and that is the reason that we adjust them often.

3275. I understood you to say just now (perhaps you will correct me if I was wrong), that in the case of a justice man who was placed on the brow by the men, the employer should not be allowed to interfere with him; did you mean to supersede in the case of a man of that sort the power of justices of the peace in petty sessions to decide whether a man should be paid his wages or not?—No; I meant that the man should be there to point out the true weight, if it was necessary, but not to interfere beyond that.

3276. Did you not say that it would not do at all for the masters to interfere with a justice man?—I think I said that the employer should not be allowed to interfere unless the justice man interfered in such a way that it would be a detriment to the working operations of the mine, but that the justice man was bound to interfere in the weighing.

3277. Did you wish that the colliers should be empowered to appoint a man who should determine, as between the master and the men, whether a waggon should be paid for or no?—I am speaking about the justice man attending to the weighing; I am not speaking particularly about what the men should be paid. All that we want is, to see that the coal should be truly weighed, and leave the paying out of the question: if we see that it is truly weighed, we can leave the rest to other powers.

3278. Supposing that a waggon was considered to weigh 10 cwt., and the weigher called it nine, and your justice man called it 10, what power would you like the justice man to have in that case?—To retain the corve until it could be weighed again; if the weigher would bring it back again and weigh it again, that would do.

3279. You did not wish to supersede the powers of the magistrates in petty sessions?—No.

3280. Is it costly to weigh the coals?—No, it is not costly; there is merely the cost of the weighing machine in the first place, and then there is a man to weigh. Most of those men are employed at about 17*s.* or 18*s.* a week.

3281. Can one man weigh for a large colliery?—Yes.

3282. Without any woman or other person to attend him?—There are no women about our pit-banks at all. One man can attend to all the coal coming from one pit; for instance, in Wharncliffe Silkstone I have seen 2,000 corves up in one day, and they have all been weighed in eight hours.

3283. As to that case which went before the Court of Queen's Bench, I believe you said that the waggons were removed from No. 1 pit; that the coal, in fact, was brought up by No. 2 pit instead of No. 1?—Yes.

3284. Was that for a long time?—No, not for long; before the case was decided, Pit No. 1 was drawing coals again.

3285. Was it a great quantity of coal that was exchanged from one to the other per week?—They were not drawing so very many at the time; perhaps 100 to 150 tons a day; perhaps 900 tons a-week were exchanged.

3286. What was the reason that, when the coal was changed to No. 2, and difficulty was placed in the way of having you at No. 2, the colliers did not appoint a new man as a justice man?—There had been a justice man there before, but they preferred for me to go from No. 1 to No. 2.

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3287. But they had the power of appointing another justice man?—Yes; but when they were well suited with their old man, they did not wish to make a change to a new one.

3288. General *Dunne.*] I understand you to say that you object to the estimation of the quantity of coal raised by measurement, because it opens a door to more fraud?—Yes; there are three or four places in the district now where they get by measure similarly to what is done in Lancashire; but I do not think that there are half a dozen men satisfied with the principle of measurement.

3289. Because the size of the measure can be so easily changed?—The size of the measure can be easily changed, and if the corve is not sufficiently full to please the man that is there to judge by the naked eye, that corve is forfeited.

3290. In sending a corve up, would it not be an inducement to a man to send it up full if he knew that he would get the just weight?—I understand your question to refer to this, that there is a greater inducement to the men, when they send them up by weight, to send them up full, than there is when they fill them by measure. In my own experience, the coal is very difficult to come at, and in some cases, when hurriers have put rather too much coal on, I have seen the man go from his place and throw off lumps, because, he says, it is too full; and yet, probably, when that has got to the pit's bank, it has been not full, and he has lost all. But now, when the system of weighing is established, the men go to the hurrier and say, "You must not take that corve like that, but fill it full," because he can depend upon its being weighed.

3291. In regard to the weighing-machine, what sort of a weighing-machine is it; can the inclination of the person weighing enable him to throw an advantage one way or the other, as with a steelyard?—The greater portion of the machines in our district are, I believe, Pooley's patent, and they are very easy and handy to work. Some of our check men, I am sorry to say, are placed right behind the employer's man, so that he cannot be near it at all; he has to turn round to see it; but when a proper facility is given it is very easy to see whether or not the coal is properly weighed.

3292. From the nature of the machine itself, is there any facility for altering it?—Yes, they can alter it to make it lighter or heavier.

3293. And that is one of the things you want inspected?—Yes.

3294. Are the weights stamped as Imperial weights?—They are not always tried by Imperial weights; there are many of the colliers who get 56 lb. weights, and they try them with those weights; some are stamped and some are not; I remember that in one case when we disputed the employer's weights, we hired Imperial weights.

3295. Are they obliged by law to employ Imperial weights?—No, the Act does not say that; it says, "truly weighed."

3296. Does not "truly weighed" mean the use

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of Imperial weights in the case of coals as in the case of every other article?—It is never enforced.

3297. Could the magistrate seize the weights?—No.

3298. Therefore you recommend an inspection?—Yes; to have Imperial weights, and inspectors to attend to them when necessary.

3299. You said, I think, that some men complained that the entire weight was not given to them, but that the masters in those collieries insisted on allowances, which induced the weighers to deduct from the weight; is that general?—It is not so much so as it was; I speak from what I have seen and heard, and I have heard this said many a time, "You must have more weight;" and that has had the tendency, in order that the man may do what the employer would wish him to do, of making him slip the weighing over, and weigh the coal roughly.

3300. Mr. *Woods.*] Did you state where you have heard that said?—I have heard it said at the Wharncliffe Silkstone collieries.

3301. Where you ever employed at the Sheep Bridge coal works?—No.

3302. Mr. *Vivian.*] You say that the hurriers must now fill these corves full; that, I presume, has been since the weighing has been adopted?—Yes; the collier can cheat the employer, of course, if there is not a very strict scrutiny at the top, because he can make burrows in this coal, and pack it hollow, so as to deceive the eye when it gets to the top; in fact, I have seen in my experience in weighing, that the corve has sometimes come up heaped up, and we have supposed that it has contained 2 cwt. over weight, and yet when weighed, it has not contained full weight; but now there is no injustice to any one.

3303. You say that now the colliers do really fill their tubs full honestly?—Yes, they try to send as much weight out on as small a number of corves as possible.

3304. Upon what do you base the statement you have made, that you have gained 14,000 tons in one half-year, or some period of time over, what it would have been if the measure had been taken?—The men were paid for 14,000 tons over what they would have been paid for, if they had got the coal by measure. I do not say that it was all in consequence of any fraud that there would have been; all the coal was secured when it was weighed; there were no forfeitures at all; we took the average as 5½ cwt.; that was the standard weight, and we got those 14,000 tons, and those had accumulated in consequence of the men being induced to fill the corves better.

3305. Your statement is, not that the men ever lost 14,000 tons, but that after the system of weighing was introduced, then the men filled the corves so much better, that 14,000 tons more came up the pit on the same number of corves?—Not exactly so; it arose partly from their exertion to fill them full, and besides that corves that they used to forfeit, and that they said were short weight, when they came to weigh them were overweight. That, with the inducement to the men to fill them better, caused this extra amount of 14,000 tons.

3306. Can you distinguish what portion of that 14,000 tons was due to the want of forfeiture, and what portion was due to the fact that the men filled their corves well?—I can speak from my own experience when five of us worked together, two young men and three colliers.

3307. Was that at the time of these 14,000 tons being gained?—I did not work in the mine after that.

3308. I am only asking you about that 14,000 tons, because you see it is a serious charge upon the owner of that particular mine if you say that it appeared that after the weighing he was required to pay the men for 14,000 tons which he would not have been required to pay them for before. Now it comes out, as I understand, that the men had actually filled their corves better than previously?—Yes.

3309. Is it for the owner's interest that the corves should not be filled full?—It is to the owner's interest that corves should be filled full when they are sent by weight, but when they are sent by measure it is another thing altogether.

3310. The expense on each of these corves is great, is it not; you have the tramming, the hawling, the bringing up to the pit, and the landing, and all other expenses, amounting, probably, to quite as much as the cutting, do they not?—Instead of the hurrier going 20 times to the working place for coal, he goes 15 times now, and brings the same quantity out.

3311. Who's gain is that?—It is both to the employer and to the men.

3312. The men have no gain in that, because the men do not employ the hurriers, do they?—Yes, they do.

3313. Do the men find their horses?—No.

3314. Do the men find the engine-men and banksmen?—No, the employer finds all that.

3315. It is to the interest of the employers, is it not, more than the men, that the corves shall be full?—It is to the interest of the employer and men. It is a very difficult thing for me to answer about its being more for the employer, because where there are forfeitures made, to the extent of 20 tons per day, the coal is sold notwithstanding, and the profit of that goes to the employer, so that it is a profit to the employer in that way.

3316. Perhaps you have never seen the cost of coal made up at the end of a year, have you?—I have heard it stated.

3317. Do you know that the wages of cutting are not one half of the total cost?—It was stated once by two eminent engineers that what they call the Wharncliffe Silkstone seam could be raised to bank at 4*s.* 6*d.* or 4*s.* 4*d.* per ton.

3318. What portion of that would go for cutting?—To the collier and hurrier there was given about 1*s.* 10*d.*

3319. Do you know whether, in selling coal, they weigh it to a pound, or whether they allow fair full weight to the person who purchases?—In selling coal I know that the employers give, in some instances, 21 cwt. to the ton.

3320. That is 5 per cent. above the weight?—Yes.

3321. Do you think it just that the employers should pay for every pound of coal, while they are required by the custom of the trade to allow some extra weight in the sale of it?—We give them 21 cwt. in all these places; there are very few with only 20 cwt. to the ton.

3322. Do they weigh in large drafts?—They are all large drafts.

3323. The large machine does not turn the same weight as the small ones do?—In some of the mines there are 20 to 30 drafts given, and when

when the truck is sold there is only one draft given.

3324. That machine, however, is not so accurate as the small ones, is it?—Yes, I think.

3325. As to the stones which come out with the coal, what allowance do you make for stones?—The allowance that is made for stones is simply overweight in this way; in some places they give 21 cwt. to the ton. In some places there are 4 lbs. to every tub of coal given in addition to the ordinary draft, that is to say, given on account of waste or anything that may be inside the coal.

3326. Do you consider it just that something should be taken off for the stones and rubbish which must necessarily be contained in the coal?—Yes, we do not object to a few pounds being allowed for that.

3327. Stones are subsequently picked out, are they not?—Yes.

3328. You do not object to something being allowed for that?—No.

3329. They are picked out to a considerable extent, are they not?—Yes, in some mines it is almost impossible to keep stones out, because the dirt is in the middle of the coal.

3330. Therefore, it is necessary that you should not weigh so very accurately?—We do not do it so at any place.

3331. As to house coal, do colliers, as a rule, get their house coal for nothing?—As a rule, I believe that in South Yorkshire they are allowed it cheaper, but they pay something. There are one or two places that allow their coal free, where it does not cost them anything but the cartage.

3332. As a rule, they get it either free or at a cheaper rate?—As a rule, they pay simply what they are paid for getting it; that is to say, the coal is given.

3333. Then something might be allowed on that score, probably, inasmuch as the collier has only paid for his coal one-half of what it costs another person?—I do not know about that. That is a privilege which has been in operation a long time, and it is dying out. There are collieries (this large one, for instance, where I have been for many years) where the men pay for their coal the same as any other persons.

3334. Would you prefer that coal should be weighed accurately, to the pound, and that the men should give up all privileges with regard to their house coal?—I would allow the house coal if we allowed a small draft on each corve for the stone that might be in it; but if, on the other hand, we did not allow that draft, then they ought not to have their house coal.

3335. If the employers were allowed to deduct the stone, you would on that score allow the men to have their house coal for nothing, because they were not paid for putting stones in the corve?—Just so; if we allow them a few pounds draft to make up for the stone, I think they ought to have that privilege.

3336. You think because they are not paid for the stone they ought to have house coal; is that your opinion?—Yes.

3337. *Chairman.*] You think that they should be allowed to send a little less in weight, and still to have house coal too?—I do not think that the house coal has anything at all to do with the weight; it is a question entirely apart from this; but still, for my own part, I may say that I am quite willing as a miner to pay for my coals, and did pay for them; it never was the privilege of mine to pay less than the regular price for coal. I like my privileges on my wages, and make the best of my way in that manner.

3338. Do you think that the men generally would prefer having the stone allowed to giving up their house coal?—Some of the men stick very tenaciously to their house coal; others do not care much about it, because they are so far from the pit that it costs them a great deal in carting.

3339. Some would not object to be paid for cutting the house coal first, and then to have it given them for nothing?—It is not really the best coal, or even the second best, that is given to them.

3340. When you talk of weighing every corve to the pound that would be the result, would it not, that men would be paid first for cutting the coal, and then that it would be given them for nothing?—If every pound of coal was allowed to us, I say distinctly that if the question is put to me, I do not want that privilege, but if I allow a draft to make up for the stone, I should want my coal for nothing; we do not want the stone in that case allowed.

3341. *Chairman.*] You are willing to give over anything, up to 14 lbs.?—That is the rule now.

3342. Mr. *Clive.*] As to the question between measure and weight, and the mode of gauging by measure; all measure, as I understand it, has reference to weight?—All that ever has come under my knowledge has.

3343. The truck or corve, or whatever you call it, has had reference to weight?—Yes.

3344. Therefore you think that the whole thing should go by weight; the coal which is sold by weight, and the coal which is got by weight?—Yes.

3345. You object to this clause as being too vague?—Yes.

3346. And you ask for some additions to it?—Yes.

3347. Could you put them in writing?—I will do so.

3348. With respect to that clause Sir FitzRoy Kelly told you that it was too vague, and you had better abandon it, did he not?—No, he did not say we had better abandon it; he said that it was very loose, and it was very difficult to get at the proper interpretation of it, but that his opinion was, that if we prosecuted the thing further in the Court of Queen's Bench the decision would be against us, and if they would reinstate me permanently he said that we had better agree to that.

3349. You knew that he was a great lawyer?—Yes, or we should not have employed him.

3350. And you knew that he was a Member of the House of Commons?—Yes.

3351. Did it occur to you to ask him why he did not make that claim less vague when it passed through the House of Commons?—It was not his fault I believe; it was mangled strangely in the House of Lords.

Thursday, 26th April 1866.

MEMBERS PRESENT:

Mr. Clive.
General Dunne.
Sir Philip Egerton.
Mr. Ferrand.
Mr. William Orme Foster.
Mr. Kinnaird.
Mr. Liddell.
Mr. Neate.
Mr. Powell.

CHARLES NEATE, Esq., IN THE CHAIR.

Mr. JOHN NORMANSELL recalled; and further Examined.

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3352. *Chairman.*] HAVE you brought with you the special rules of your district?—Yes, I have a copy of them.

3353. Will you put them in?—(*The Witness handed them in.*)

3354. Are those the special rules of the whole of the district that you are giving evidence about?—The special rules for one colliery are the special rules for the whole collieries.

3355. Do you mean that the special rules are the same for one colliery as for another?—Yes, in that district. I do not see more than a little alteration, if any, of those rules. I have been requested to put this in. Perhaps I may say that I have been requested to put before the Committee the following proposal with reference to the question of weighing—"That at every coal mine, colliery, ironstone pit or mine, the owner thereof shall place, on the pit-head or bank, an imperial standard weighing machine, for the weighing of the material gotten by the miners in such coal mine, colliery, ironstone pits or mines. The said weighing machine shall be under the inspection of the inspector of weights for the district, as in the case of all other goods sold by weight. The miners of every coal mine, colliery, ironstone pit or mine, shall have power to place a person at said weighing machine at their own cost and charge, to see that the material is truly weighed; and he shall have every facility afforded him of taking a true and perfect account of the material sent out by the men on whose behalf he acts. The person so appointed by the men shall not in any way interfere with the working of the mine, colliery, ironstone mine or pit, but he shall have power to see that the weighing machine is just, and that the weights are truly made on behalf of the miners engaged in said mine, colliery, ironstone pit or mine."

3356. I believe you wish to give evidence about the ventilation of mines?—Yes.

3357. What have you to say upon that subject, in the district as to which you are speaking?—The miners of South Yorkshire have not a great deal to say with respect to the law as it now stands, in regard to ventilation.

3358. Is the ventilation of mines in a satisfactory state?—In some collieries it is, but not in others.

3359. Are you speaking from your own observations in respect of ventilation, or are you giving reports from others?—I am giving reports from others. I have been round the pits and on the pits' banks since 1859. I have not had an opportunity to view the inspection myself, but the position in which I am placed causes me to come in contact with the men of South Yorkshire from one end of the district to the other; and there are reports made to me from several collieries as to the state of the ventilation, and as to the defect that the miners think ought to be remedied.

3360. You cannot vouch for the correctness of those statements, but you are able from your past knowledge and experience of working to judge how far they are sensible and reasonable, supposing them to be true?—Yes. I should be very sorry to take any report from any man whom I could not rely upon; in fact, I always question the person over in such a manner that I can rely upon his statement.

3361. What, according to the statements that you hear, are the chief defects in the ventilation of the mines?—The greatest complaints that are made are generally on account of not having sufficiency of air. Even where the miners have to work with lamps they have not sufficient air in which they can breathe properly in order that they may do their work. The ventilation is very inadequate at some collieries where lamps are used.

3362. Inadequate, not only for safety, but inadequate for comfort and health?—Yes; inadequate for their health even when they are working with locked safety lamps.

3363. Is the ventilation worse where they work with locked lamps?—In some of our collieries, where lamps are exclusively used, there is not that regard paid to the ventilation which the miners think ought to be paid to it. In others, where locked safety lamps are exclusively used, they do pay pretty good attention to the ventilation.

3364. Does the defective ventilation consist rather in the want of a sufficient furnace power, or in the want of a proper distribution of the air?—In some instances it consists in the want of a sufficient furnace power, and in other instances it is from the want of a proper distribution of the air. We have one colliery where it has been frequently complained of, and the men say that it is from want of furnace power.

3365. What is the name of that colliery where

where there is an alleged want of furnace power?—There is an alleged want of furnace power at a colliery near Barnsley, Mr. William Day's. It is said that there is not sufficient ventilation there in consequence of their not having sufficient furnace power.

3366. Do you suppose the furnace power to be interfered with by using the up-cast shaft for the purpose of raising the coal?—In some of the mines it is interfered with in consequence of having the up-cast shaft not sufficiently wide enough. For instance, at the colliery I am speaking of, the men allege (and they have given information to me on the subject on several occasions) that there is only one up-cast shaft and two down-cast shafts for one mine, or rather two pits; and it is supposed by the miners themselves greatly to interfere with the ventilation, and where the pit is filled with the winding gear or tackle, or whatever we call it, it has a tendency to obstruct the passage of the air.

3367. Are the upcast shafts commonly used for raising coal in that district?—Yes, they are commonly used. In some of the collieries there is no winding tackle that interferes with it at all, but in others there is.

3368. Do you conceive that, except that it interferes with the ventilation, there is any other objection to using the upcast shaft?—Yes, there is another objection: there are several of our collieries where the men have to descend and ascend the upcast shaft.

3369. Does that affect the safety of the men in any way?—Certainly; the smoke and heat of the shaft is so great that it is very dangerous, and the least mishap of the winding machinery which would cause suspension of the men for a few moments, would be the cause of death. We have seen cases where it has been so.

3370. Does it add to the danger by increasing the rapidity with which they descend?—Yes, we have seen upcast shafts where that is so; I am speaking now of cases where the furnace power is in the bottom of the upcast, and in those cases there is a tendency to get the men through the heat and smoke as soon as possible.

3371. Therefore they let down the men at a dangerous speed?—Yes; I remember a boy once getting killed in consequence of that; the heat in the shaft, in consequence of the furnace power, was so intense that the engine tenter let down the boy and a man who was with him as quick as possible, and through going at such a speed the chair or corve came in contact with the furnace mouth scaffold, and upset the corve, and threw the boy and man out of it.

3372. If the corve had been going down at the ordinary speed, would it not have been upset?—Probably it might have been upset, but I do not think it would have thrown the men out; it was the quickness of the descent that threw the men out; if it had been going slowly I think that probably it would not have thrown them out in the manner it did.

3373. This scaffold was not necessary for the furnace; it was to communicate with another passage of the mine, was it not?—Yes.

3374. It was nothing to do with the furnace?—The furnace so happened to be constructed in that part of the mine.

3375. One complaint then as to the ventilation, is the want of furnace power; and that furnace power you conceive to be to some extent interfered with, by using the upcast shaft for going up and down?—Yes; and also by their not having sufficient room, or rather not so many upcasts as they ought to have; sometimes it requires either a very wide upcast shaft, or more than one upcast shaft.

3376. In this mine that you speak of, you say there is one upcast shaft to two downcast shafts?—In this mine, the colliery of Mr. William Day, there is only one upcast and two downcast shafts.

3377. What is the distance at which the two downcast shafts are from each other?—I have not ascertained that.

3378. As to the distribution of the air, are there any complaints about the distribution of it?—In regard to the distribution of it, it is not properly attended to at some of the places. For instance, there is a colliery near Sheffield, where that is the case.

3379. Is that in the district that you are speaking of?—Yes, in the district of South Yorkshire; it is Unwin's and Shaw's Colliery, Brightside. I had a report from a man the other week, that they had been working 150 yards out of the air. That is not a proper distribution of air, I presume.

3380. Without mentioning the particular cases, do you hear commonly, complaints that they have to work at too great a distance from the air?—Out of perhaps 30 collieries, I have not heard the men complain in more than four or five, of having to work so far from the air. It is not all the collieries where that occurs, but a few of them only.

3381. Have there been many accidents in that district, apparently owing to defective ventilation?—There have been within a few years a great many.

3382. But since the Act of 1860?—Since the Act of 1860, there have been several; the Edmund's Main accident has been since that. That was in 1862, and 59 lives were lost.

3383. Can you give us the particulars of that accident?—I believe that the cause of that accident was the want of a proper supply of fresh air. It was a part of the working that they were extending very rapidly, and in fact, according to the evidence that was given at the inquest, there was not due regard paid to the ventilation, and gas was allowed to accumulate in the place, which ignited by the lighting of a shot, set fire to the coals.

3384. How many lives were lost from that circumstance?—Fifty-nine.

3385. What was the verdict of the coroner's jury?—The first verdict was "accidental death." The miners were not satisfied with that verdict, and we appealed to Chief Justice Cockburn; I think it was for a new inquiry.

3386. The inquest was quashed, was it?—Yes; in the case of this inquest on the 59 lives that were lost we were not satisfied with the first verdict, and the miners petitioned for another verdict, and got it; and the jury brought in that the manager was guilty of neglect, and they made certain recommendations. They said that the air was not sufficient, and that there had not been regard paid to the ventilation as required by the Act, and as they brought in that the manager was a partner, and was concerned in the management of this mine, there was compensation got for the widows.

3387. Did those who suffered bring an action?—Yes, they brought an action because there had been neglect on the part of those in authority to ventilate the mine.

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3388. Where was that action brought?—It was compromised; in London.

3389. It was not tried?—It was not tried.

3390. Have you anything else to say about ventilation?—With reference to the Act as it now stands, of course we have several suggestions that we think would be improvements, but on the whole there is not so much fault to be found with the Act as it stands as there is with the manner in which it is executed.

3391. Do you refer to defective inspection?—Defective inspection. Mr. Morton, the Government Inspector for our district, has something like 460 collieries to inspect, and if he was ever so disposed to inspect them properly he could not do so; it would take him some years to get through them.

3392. Have you anything else to say as to the terms of the general rules in the Act; the Act says "under ordinary circumstances," does it not?—We have a little suggestion to make in reference to the first general rule.

3393. That rule says this: "An adequate amount of ventilation shall be constantly produced in all coal mines or collieries, and ironstone mines, to dilute and render harmless noxious gases, to such an extent that the working places of the pits, levels, and workings of every such colliery and mine, and the travelling roads to and from such working places shall, under ordinary circumstances, be in a fit state for working and passing therein." That has not anything to do with the question of ventilation on which you have been speaking, I presume?—We object to the words "under ordinary circumstances." We think that those words ought to be left out. We think it ought to say "shall be in a fit state."

3394. But, supposing there has been a great explosion in a mine, the roads cannot be kept in a proper state; there must be a time during which the roads cannot be in a proper state, must there not?—If this first rule be carried out, no time will occur when they may not ventilate all working places and travelling roads; or, otherwise, if it was a thing impossible to do, we should not want them to be either working places or travelling roads. If it is not possible to ventilate those places, we want them to cease to be either working places or travelling roads. We think that they might be ventilated; in fact, that every working place in a mine might be ventilated.

3395. Mr. *Powell.*] You wish to omit the words "under ordinary circumstances"?—Yes; we wish to omit the words "under ordinary circumstances" in the first rule, and we also wish to add to the first rule that all accessible places shall be ventilated. We think that those words "ordinary circumstances," put in there, greatly interfere with the true meaning of the first rule.

3396. *Chairman.*] As to the second rule, "All entrances to any place not in actual course of working and extension, and suspected to contain dangerous gas of any kind, shall be properly fenced off, so as to prevent access thereto." Your suggestion rather applies to that, does it not. Instead of the second rule, you would have it provided, that all accessible places instead of being fenced off should be ventilated?—There would be little use at all for the second rule if the first rule were made as it ought to be. The reason that we have for suggesting what I have mentioned is this: there are several places in our mines that are driven in perhaps 150 yards, and they stop for something or other; perhaps they do not require them to go any further until a certain time. We have often seen cases in which these places have been allowed to fill with gas because no one has worked there, and then when they are filled with gas there has either been a fire-board put up at the end of them or a brick stopping made, and the gas has been pent up; and I once saw that in such a case the bricks were knocked out and the gas was let out. We think that where any place similar to that is required to stand it ought to be ventilated, and that the gas ought not to be allowed to be pent up, because it is very easy to build a brick wall and thereby pen up the gas.

3397. Have you any case to mention of mischief arising from the gas knocking out a brick in such a brick wall?—I once saw a very narrow escape at the place where I was employed. I was employed at the pit bank at that time, but the men reported the case to me at once, and I went with one of the working miners to the Government Inspector respecting this matter.

3398. What was the statement which the men made to you?—The statement was this, that there were about 100 yards of road that was cut, and was stopped on some account or other until certain workings got into it; there was a brick wall at the end of it; it was fenced off entirely, and there was a working miner set to work at a place near it—that is to say, to drive another place into this place, which had been left standing for a considerable time; one of the deputies had been expecting that he would shortly get through into this place that had been fenced off, and as he thought he would go round to the other side and knock in order to see how far he was from it, and in order to ascertain, he knocked down some bricks; then the gas came into the workings where the men were, and there were naked lights not far from the place; and it was a deputy that did that.

3399. That danger arose, did it not, from his not observing the second rule, and not from the imperfection of the place?—Yes, but it would have been just as easy to work the air 100 yards round that place as to build a brick wall.

3400. Which would be the most economical?—Building the brick wall; it will not take long to build a brick wall about five feet wide and six feet high in our mine, but to take 100 yards of brattice would take longer.

3401. Instead of the second rule, you would wish that all such places should be ventilated?—Yes, I think that all such places as those ought to be ventilated.

3402. Mr. *Liddell.*] The South Yorkshire district, with which you are so well acquainted, may be considered to be a dangerous district in regard to the prevalence of dangerous gases, may it not, for the most part?—Yes, it is considered to be a district that has a deal of gas in it; of course, we have had a proof of that.

3403. The very general use of the Davy lamp is pretty strong evidence of that fact, is it not?—The Davy lamp has been generally put into operation at some of our mines exclusively, when they have heard of these fearful explosions at other mines.

3404. Rather as a precautionary measure, than as any absolute necessity, you mean?—The Government Inspector has on many occasions recommended that locked safety lamps should be exclusively used in certain mines that are known to contain these dangerous gases, and there certainly is a great objection to the safety lamp. If you

you go round among the miners you find very few of the miners generally that like the Davy lamp or the Stephenson lamp; they prefer ventilation beforehand.

3405. Are you of opinion, that where these gases are so prevalent, by an adequate amount of ventilation, the use of the Davy lamp might be rendered unnecessary?—I believe that the greater part of our mines in south Yorkshire might be worked entirely without a safety lamp being in them, so far as the working of the men is concerned. I do not say that we can do without the safety lamp because places must be examined with it, but when it comes to be necessary for the men to work with a safety lamp, I think it is not fit for any human being to be there when a naked light will not burn, and I think that the place ought to stand till proper ventilation can be got there. We know that a man can work with a safety lamp, but it is destroying his health, and it is destroying his eyesight, and moreover, it is relied on by a great many that all is safe when we have safety lamps, but the fact is to the contrary.

3406. I understand you to say that in your opinion the inspection of the south Yorkshire district is inadequate?—Yes, I do say so. I believe that we should have less accidents not only from explosions, but less accidents occurring from falls of coals and so on, if we had a better system of inspection.

3407. With regard to a better system of inspection, I have no complaint made by you against Mr. Morton personally; but you complain of the immense amount of inspection that is thrown upon him?—I should be very sorry to complain of the way in which any man performs his duties when he has more put upon him than he can possibly attend to. A great many of our miners find fault with Mr. Morton; but on the whole I think it is almost impossible for a man like Mr. Morton, or any other man, to execute such enormous duties as he has to do, and properly attend to them.

3408. Did I rightly understand you to say that he inspected 450 pits?—There are 460 collieries in his district, and I say it would be impossible for him to execute his duties properly; some find fault with him, but I should be very sorry to do so.

3409. How long has Mr. Morton been in that district?—He has been there for a number of years. I am not aware that Mr. Morton has been in any other district. I think he has been inspector in that district about 12 or 14 years.

3410. Can you state how often Mr. Morton has inspected these 460 pits?—I have taken the trouble several times to ascertain how many times Mr. Morton has been to certain collieries, and the reports have been that some of the men have worked there 17 years, and they have never seen him at all.

3411. But it is quite possible, is it not, that Mr. Morton may have visited the workings without the knowledge of the men?—No, I do not think it is possible for any inspector to go into any district without the knowledge of the men, because there are pretty good indications given by which they understand it.

3412. It is generally understood by the colliers either that the visit is expected, or that it has taken place, is that what you mean?—It is understood that the visit is expected at many of our collieries; as there are very great preparations made when the inspector is coming.

3413. The house is set in order for his reception, is that it?—I have seen it so. I have seen men working night and day to get it in order, and I have told Mr. Morton so myself.

3414. So that everything is in apple-pie order when he arrives?—Yes, as much as possible, and then when he comes he is led into certain parts of the working by deputies and others in authority.

3415. Has it never come within you knowledge that he has been taken through the workings by the men themselves?—I can give you the instance of this man that knocked down the stopping. I was one that went to complain to Mr. Morton, and he told me and the miners that went with me, that before he could go and visit the colliery, he should have to write to the owner of the colliery. I said, "Well, all the pit is standing on account of this deputy; they all think that he is not fit for the work, and they are out now." He said, "I must give this notice;" and he said that it would be three days before he could get there, and it was three days, and a great deal was done in those three days, and when he came there none of the workmen were asked to go round; but the manager and the deputy went round with him.

3416. Do I rightly understand you to suggest that, as a remedy for these things, and as a means of more efficient inspection, the visits of the inspector should be occasionally made unawares?—I think that the mines should be inspected periodically.

3417. And without notice being given?—I think that an owner or deputy ought not to know when an inspector is coming, but that he should take the pit just as it is.

3418. You have alluded to Mr. Day's colliery near Brinsley, and you gave an answer upon which I wish a little explanation. You were speaking of the upcast shaft in that pit, and you told us that there were two downcast shafts and one upcast to two mines?—Not to two mines, but to two pit companies of men.

3419. You told us that the least suspension of the action of the machinery in the upcast shaft would cause death?—That it would cause death where the men ascend and descend.

3420. I want you to explain to the Committee exactly how the suspension of the action of the machinery would interfere more than usually with the current of the air?—It is generally understood by those who have been practically engaged in these mines, as I have been, that the outlet ought to be considerably larger than the inlet; and, for that reason, we say that even where there is only one upcast and one downcast, when there is winding machinery, and when there is, perhaps, a ton weight, say four empty corves and four full ones, put in the chair, and one chair is coming up and one going down, then we think that that greatly impedes the ventilation. We think, therefore, that the upcast should be clear. But the greatest objection we have to upcast shafts, that is, the furnace shafts, is to men ascending and descending by them. But that would impede the ventilation, even if there were no men descending at all.

3421. Is it your opinion that there ought to be an upcast shaft for every downcast shaft to secure perfect ventilation?—It depends a great deal on the extensive working of the mine, and it also depends a great deal on the size of the shafts. What we want is an adequate amount of ventilation, and that cannot be produced except the

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upcast shafts are sufficiently large to emit the air that has expanded and accumulated itself in the mine.

3422. With regard to these magazines of gas which exist in places fenced off under the Act, I understand you to object altogether to the practice of fencing off these places?—Yes; we strongly object to any place being fenced off that is full of gas or likely to fill with gas; we think that the air should constantly go through it.

3423. You illustrated the danger by an occurrence which took place in consequence of a deputy knocking a hole in the brick partition. Was not that a very imprudent act to be committed by a responsible man?—It was, indeed, a very imprudent act; but we think that gas, in particular, never ought to be allowed to accumulate to such an extent that, in consequence of of a brick being knocked out, the gas would escape.

3424. He ought to have known, from the character of the gases in that pit that that accumulation had taken place, I presume?—Yes; if he had been competent, he would have known it.

3425. He went with a good motive, he went with the object of finding whether the new workings were approaching this abandoned portion of the mine, did he not?—Yes. Then there is another danger, the brick walls in our mines do not remain as permanent as the brick walls do on the surface. I have seen many brick walls pulled down with a fall of the roof; and then the gas escapes.

3426. But I understand you to recommend in all mines, that there should be no brick partitions at all, but that these abondoned workings should, in all cases, be kept in a fit state of ventilation?—They should be kept in a fit state of ventilation, and if it is necessary to have a brick wall at all, it should be built there only for the purpose of keeping the men away for a time. There are circumstances that arise in our mines that require them at times, but only for a short time; air might be got there before it is fenced off for months and months.

3427. You would recommend, I presume, that notice should be put up that these portions of the pit are abondoned?—That is in the general rules. We should be sorry to say that no one should go near to them, but we object to its being made as a permanent wall or stoppage.

3428. Mr. *Foster.*] Would you desire that the inspectors should have the direction of the system of ventilation in the pits, and the general management of the workings?—No, I do not suggest that the inspectors should have anything at all to do with that, any further than recommending such alterations as would be accepted, or at least taken notice of by the employer. The rules of the Act in many cases point out distinctly what should be done, and all we want the inspector to do is, to go there and enforce what the Act provides.

3429. Have there been any complaints made to the inspector of inadequate ventilation?—Yes, there have been many complaints of inadequate ventilation made to the inspector.

3430. Have those complaints been attended to?—There have not generally been visits paid; there have been in some instances. I can give you a case that happened nine months ago at an important mine in South Yorkshire. The men complained, and I advised the men to go to the inspector, and I went with one of them to see him. He kept me and one of the men five hours with him, and then he said he would attend to it; in fact, he said he would write, and he did write; and afterwards he told us that the employer had been to him to see about this, and to ask his opinion about it.

3431. And was the complaint attended to by the owners of the pit?—I believe they took some steps to put it right, but yet it is not efficient; they did remedy some things that were complained about shortly afterwards.

3432. Did that remove the fears entertained by the men as to working in that particular mine?—There were some parts of the mine that were very badly ventilated that were better afterwards.

3433. You state that a complaint made to the inspector had his attention. What further change would you have made in the system of inspection?—I said that some of the complaints were attended to, and I gave that as an instance. The inspector did not go to the place at all.

3434. I think you stated that you would have more inspectors?—Yes, more inspectors to enforce the law laid down.

3435. You stated that in your South Yorkshire District there were 460 collieries?—Yes, I believe that is so.

3436. How many pairs of pits, or distinct and separate workings, would there be, as far as you could judge, in those 460 collieries?—There would be a great many; I can hardly say how many.

3437. How many additional inspectors do you think would be required to give the attention that you would seek to all these several pits?—To examine the mines thoroughly it would take a great many; but I believe that if there was any additional number put on it would have the effect of causing the deputies and some of the owners of our mines (they do not all want looking after, some seem to pay great regard to the lives of the workmen) to look more strictly to their duty, and to see that the Act was attended to.

3438. But supposing that a certain additional number of inspectors were appointed, there might still be cases, might there not, where every pit or working could not be efficiently visited?—They might be more efficiently visited, instead of a great many being neglected, as they are now, and that would have a tendency to keep the others right.

3439. Would it not still be necessary in some cases, in the event of the ventilation being defective in the men's opinion, for them to give notice of such supposed defective ventilation to the inspector or inspectors, however many there might be. Could any sufficient personal inspection be given to all these several pits but what there must be, in the intervals between the inspector's visits, times when the ventilation might be imperfect in the men's opinion?—As the inspection is now, there are very few visits made to the collieries at all, and if we had more visits I will not say but that it would be the same as it is now, to a certain extent; there would be reports made from the men as to certain cases of neglect, even if there were more inspectors.

3440. Are there many complaints now made by the men which are unattended to?—There are complaints which are unattended to that are made by the men now. And another thing is, that in the case of a great many of the men reporting to inspectors is a duty that they do not like to attend to. There are very few men anywhere

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in the district but what have to be sufferers in consequence of reporting things to an inspector. We have several cases of that description, and most men would do anything and go anywhere rather than make a report to the inspector, because the result would be that there would be no more work for them in the district.

3441. What do you mean by their being sufferers?—They are turned away from their work for making reports of anything that is wrong in our mines.

3442. Even if there is a good foundation for the complaints?—Yes; the better the foundation the sooner they have to go.

3443. Is an explosion in their mines a thing that the masters particularly like?—They do not like explosions in their mines, of course.

3444. Any more than the men do, I presume?—But explosions do take place in the mines. And then too a great many of the owners consider that the mine is safe, and some of the men too if the locked safety-lamp is used; and I have seen in my own experience many places driven with an insufficiency of air; they will run the risk of all being safe for fear of being put to a trifling expense, and they will not put up the brattice. They do not imagine that anything will happen, but it does happen many times.

3445. Can any amount of inspection that you can suggest prevent such occurrences?—Yes, I believe that proper inspection would prevent such occurrences. I believe we should not hear of anything like the accidents we have if we had proper inspection.

3446. Must not such inspection be something like taking charge of the management and ventilation of the pits?—No; the Act distinctly states what must be done, and if it was done I do not think we should have any explosions at all.

3447. Do explosions never occur from the carelessness of the men?—If the gas was not there the explosions would not occur.

3448. Is it always possible, even with any amount of ventilation, to prevent the gas being there?—It is possible, in the case of all the working places in all the mines to keep the places ventilated, or otherwise to keep the lamps, and the lights, and the men, out of them altogether.

3449. But in fiery mines is it not the case that gas will come upon the men in the course of their workings in spite of any ventilation?—There are not many such.

3450. But are there some?—There may be some exceptional cases, but not so many as are reported to be, I believe. My experience has led me to say, that a sufficiency of air close behind the working man will sweep away the gas which is given off. I have worked in places myself where I have been very nearly smothered for want of air, and where you could hear the gas all around you.

3451. Have you heard of the men complaining of cold from too much ventilation?—I have not complained of it. It is rather difficult to keep the lights in where that is the case, but I do not think that the great bulk of the men will complain of having too much air; I have heard of it.

3452. Mr. *Clive.*] You state that the better the foundation for the report that a man makes to an inspector the more likely he is to be discharged?—Yes.

3453. Do you mean that to apply to masters generally?—No, not generally. There is a great difference in the employers; some of the employers would do without inspectors at all.

3454. They do not all need looking after?—They do not all need looking after; that is what I say.

3455. If you had a system of regular inspection, such as you suggest, you could not distinguish, could you, between those masters that do need looking after and those that do not; the inspector must look after all equally?—I should think it would be a pleasure to him and to all concerned to look at the mines of those that looked after them properly.

3456. That is not my question; supposing you had more inspectors, as you suggest, could you point out any particular mines they should inspect; must they not inspect all?—Perhaps that would be better, because it would take the responsibility of reporting away from the men.

3457. Are you acquainted with other districts besides your own?—I have worked in other districts, but not for these last 12 or 14 years.

3458. What other districts have you worked in?—I have worked two years in Derbyshire.

3459. Do you know how many collieries there are there?—I believe there are 300 there to an inspector.

3460. Do you know how many there are in Staffordshire?—There are a great many there. I cannot tell exactly the number.

3461. Do not you think it possible that one inspector may do a great deal more in visiting than others?—Yes, I believe so.

3462. Have you ever heard it said which is the most vigilant inspector and which is the least vigilant one?—There are some in Lancashire that come direct from the men and give good reports.

3463. Will you mention some?—Mr. Hickson and Mr. Dickenson.

3464. Do you recollect the Act that was passed in the year 1862 for additional shafts?—Yes, for additional escape shafts.

3465. That Act prescribes that "It shall not be lawful for the owner of an existing mine to employ any person in working within such mine, or to permit any person to be in such mine for the purpose of working therein, unless there are in communication with every seam of such mine for the time being at work at least two shafts or out-lets." Do you recollect that?—Yes.

3466. Is that regulation generally carried out?—We have very few collieries in our district but what had two shafts in 1862; it has been the practice in the South Yorkshire District, when they have commenced going down to a coal field, to put down two shafts at once.

3467. But in those cases where there were not two shafts has an additional shaft been provided?—I do not think I have heard of one colliery that is without two shafts.

3468. And where there are two shafts one of those shafts would be the upcast and the other the downcast?—Yes.

3469. You do not know of any case in your district where an additional shaft has been made?—Not for the purpose of complying with that Act, because they generally had two shafts at first.

3470. With respect to ventilation, are there not great spaces very often walled off which are receptacles of gas?—There are some of the levels and some of the headings which are fenced off.

3471. Could any ventilation reach them?—Yes,

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Yes, ventilation could get there as well as anywhere else; but they do not think it worth while to ventilate them, because they are stopped for some period, say two months or three months.

3472. As to special rules, each colliery has special rules of its own, has it not?—I have found very little difference in them, they are pretty much the same for the district.

3473. In the event of your having an additional number of inspectors you would have them look to all the rules would you not, special as well as others?—Yes.

3474. Do not you think that would increase their labours enormously?—If the rules were properly made they would be the law itself, and all that the inspectors would have to do would be to see the rules carried out; they would not have to attend to their being altered.

3475. I did not ask you that; but they would have to attend to all those rules as well as to the ventilation, would they not?—Yes, particularly to those regarding life and limb.

3476. The inspector could not attend to one portion of the rules, and leave the others, could he?—No.

3477. What time would it take a man to go over one colliery and see that all the rules were attended to?—There are some of the pits where it would take him a day to do that, and at some of the pits it would take him two days thoroughly to examine the working places of the mine.

3478. No pit would take less than a day, would it?—Some might, but not many.

3479. How often do you think we should visit the pits in a year?—If an inspector was to come round about once in six weeks or two months to each colliery it would do.

3480. Twice a quarter?—Yes, once or twice a quarter.

3481. Do you think that each of those 460 collieries should be visited by an inspector six times a year?—I think that the law might be carried out without six inspections a year.

3482. Do not you think that in that case the inspector would be practically the master of the colliery altogether?—No, I do not think he would have anything to do with the mastership of the colliery at all; his duties would be laid down by the Act, and if he found the place not ventilated there would be the law for cases of neglect; and if he found any rule that was violated, of course it would be a violation of the law and he would know how to proceed.

3483. General *Dunne.*] By the 16th clause of the 23d and 24th of Victoria, the inspectors have the power to inspect when they like, have they not?—It says, "at all reasonable times."

3484. But they may choose the time and go without any notice, may they not?—Yes, I think that, according to the Act, they are not tied to give notice. I do not see that anywhere in the Act.

3485. There is no obligation, then, to give notice?—No.

3486. Would it do a great deal of good for them to go at uncertain times?—Yes.

3487. Then it is their own fault, is it not, that they do not go without notice?—I suppose so. I have heard of some cases where they do go without notice.

3488. Do not you think that uncertainty of visits would make the managers more cautious?—Yes.

3489. And the inspectors, you say, have full powers to do that if they choose?—Yes.

3490. But they do not practically do so?—I do not think they do generally.

3491. Do you apply that to all the inspectors, or only to one?—I have heard of inspectors not giving notice, but I never heard of Mr. Morton coming to any of the collieries in South Yorkshire without notice. I have often heard of his giving notice. He might have gone without giving notice, and I not heard of it; but I have heard of his giving notice.

3492. Do yon think that the inspectors have more than they can do at present?—Yes; there is many a pit finished, and the inspector knows nothing about it but by report; he never sees it.

3493. Therefore, to carry out the system properly, you must add to the number of the inspectors?—Yes; we want more Government inspectors.

3494. If there is any complaint made to the inspector, is he not obliged to go to the mine?—No, I do not think that the Act compels him to go.

3495. It would be his duty, would it not, in conformity with the spirit of the Act?—He does not, in fact, go there.

3496. In cases of accident, does he not go there?—He attends the inquest on some occasions, and goes down to the mine where the man was killed, but sometimes it is a week or two after.

3497. The inspectors make a report annually, which is laid before the House of Commons, do they not?—Yes.

3498. Would not each of those reports show the number of collieries, and so on?—Yes.

3499. You say that, in the case of an inquest which brought in a verdict of accidental death, where a number of colliers were killed, that verdict was impeached afterwards in the Court of Queen's Bench?—Yes.

3500. What class were the jury composed of in that case?—They were some of them small shopkeepers.

3501. Do you think that they had any interest in collieries?—Some of them had.

3502. You did not think that they were quite impartial?—I believe that, as to the first verdict, all of them signed the verdict for "accidental death" but one; and I believe the second jury was what we call an impartial jury.

3503. And then compensation was made?—Yes, when the jury brought in the manager, by their verdict, the widows took up the case.

3504. Mr. *Powell.*] What do you think should be the duties of an inspector in each visit; do you think he ought to go through the whole mine?—An inspector gets the plans of the mine, and I think that the principal working places, in fact, we may say all the working places, if we could get the inspection as we should like it, should be inspected. In particular, it would be better that every place in the mine that was accessible, should be inspected too.

3505. I do not quite understand what you mean by the term "accessible;" supposing there was an abandoned working, which was bricked up, would you call that an accessible place?—No, of course it would not be an accessible place if it were bricked up; but all places that are open, so far that men could get into them by travelling roads, and so on, should be called accessible. Abandoned workings that are liable to be re-opened again, I think should be ventilated.

3506. But an abandoned working, if abandoned finally, and for ever, you would brick up?—If it is fenced up entirely, of course we come away

away from it. There are certain places that we never go into scarcely, and those might be ventilated when the men come up to them.

3507. Take the case of a seam which is entirely exhausted, either above or below the seam which is in working, would you have all access to that blocked up?—Yes; if it is an exhausted working. It is such workings as I have described that are laid up for a short time, with the expectation of recommencing, that I would have ventilated.

3508. Sir *Philip Egerton.*] I understand you to say, I think, that the defective ventilation to which you have alluded, is owing to faults in the system of ventilation adopted; for instance, to the fact of there being only one upcast shaft and downcast shaft?—Yes, the inspector could find that out.

3509. I want to know whether, in your opinion, the defective ventilation is not sometimes caused by a defective working of the system?—Yes, sometimes.

3510. Who is responsible for working the system in the levels; the attendance to doors, the brattices, and so on?—The employer is responsible for that.

3511. Does not the deficiency of air sometimes arise from a neglect in carrying out the underground machinery of the mine properly?—Yes.

3512. How would you meet that case?—The fact of the inspectors coming and putting the law into execution would prompt the owners, and all in authority in the place, to put those defects to rights.

3513. These are defects, as I understand, that may arise two or three times in a day, are they not?—If there were a due observance of the rules, that is to say, if the rules are properly attended to and enforced, there would not be much defect in the ventilation, in fact, no defect at all. In the first place, if the ventilation power was in its proper form, and then if due attention was paid to any defect in the ventilation through the workings, doors, and so on, the ventilation would be good.

3514. These doors are shut by boys, are they not?—Yes, they should be.

3515. Suppose one of these boys goes to sleep and neglects to open or shut the doors?—Such boys of course would be punishable.

3516. But you could not attribute an occurrence of that kind to the fault of the inspector, could you?—No, not in the least.

3517. I want to know whether this defect in the ventilation is not sometimes due to the defect in working the underground machinery over which the inspector could have no control?—I say that the inspectors would have control over us in examining all the working places, and if there was not an adequate ventilation they would soon find out where the defect was, and which rule was broken.

3518. You have alluded to miners working 150 yards beyond the air?—That was a case of the want of brattice being put behind them.

3519. But the direction of the current of air is controlled very much by the doors, is it not?—Yes.

3520. Might not what you have alluded to have been attributable to the doors being left open?—It would not have anything at all to do with the ventilating power; it was only the neglect of not putting the brattice there to carry the air to the men, because when there is no place that is driven through anywhere near the man's working place there is no current, and where there is no current there must be a brattice taken after the men.

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3521. The air is admitted by means of these doors to the level, is it not?—It is turned into the levels.

3522. Then if one of those doors is left open when it ought to be shut the direction of the current of air will be interfered with?—Yes.

3523. That would be a casual occurrence, would it not, and not a case in which an inspector ought to be held responsible?—That is so.

3524. You state that all these temporarily abandoned workings ought to be ventilated?—Yes.

3525. I suppose the more workings you ventilated in a mine the greater the expense of ventilating that mine?—Yes.

3526. If all those levels temporarily abandoned were to be ventilated, would not that complicate very much the system of ventilation under ground?—No.

3527. Would you not require two currents of air?—If there was sufficient ventilating power, of course, in these places I have been speaking of, the same air that worked them when they were driven could be supplied to them when they were standing.

3528. But the more drifts to ventilate in a mine the greater the current of air required?—Yes.

3529. In that respect it would complicate the system of ventilation?—Yes.

3530. Have you been in the habit of using auxiliary means of ventilation; for instance, wind fans, in the case of a working at the end of a level some distance from the supply of air; do you ever supply a machine for carrying that air on at the end of the working?—We have only the brattice; no machine.

3531. Could you not, in a case of that kind, adopt one of these wind fans?—If there was an insufficient quantity of air at the end of a place of that description, and they could not get any other means, they might ventilate it in that way for a short time.

3532. Mr. *Ferrand.*] Does the want of good ventilation make the labour of the men more severe?—Yes, it does make the labour of the miners more severe; and sometimes they can scarcely walk home in the afternoon from the want of it.

3533. The want of it impairs the health of the colliers?—Yes.

3534. Is any public notice given to the men when the inspector comes to inspect a colliery?—No, there is no notice given to the men, at least not from the inspector; it generally oozes out in some way or other from the authorities, the deputy or some one else, that the inspector is coming. It is in a very mysterious manner that it oozes out.

3535. But it does get out?—Very often it does get out that the inspector is coming.

3536. When the inspector surveys the colliery, does he ever ask any of the men whether they have any complaints to make?—Very seldom.

3537. Does he do it sometimes to your knowledge?—I have never heard of his doing it in any of the collieries in our district when he has come to visit them after an accident.

3538. Do you think it would be an improvement if the inspector was obliged to ask the men

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whether they had any complaints to make, or if there was a book kept for the purpose of entering grounds of complaint?—Yes, I believe it would be beneficial for all parties concerned if he did ask the most intelligent of the miners.

3539. You would approve of that?—Yes.

3540. You have stated to the Committee, have you not, that some bricks were knocked out of a wall when that fearful loss of life took place?—No, there was no loss of life at that time that I spoke of.

3541. No harm was done in that case?—No. The men took an alarm, and the lights round about the place were removed as soon as possible.

3542. You have said that a great many more inspectors would be required; how many more do you think; have you any idea of the number?—I should think that three or four inspectors for such a district as Yorkshire would be able to carry the ventilation out well, say three more.

3543. That is for your district?—Yes.

3544. How many collieries have you in your district?—34 in the South Yorkshire district.

3545. How many inspectors have you now?—We have one inspector, but he takes all Yorkshire as well.

3546. If you had three more inspectors, that would be altogether four inspectors, giving nine collieries to each inspector upon the average?—They are most of them very extensive collieries in South Yorkshire, and that is the reason why I say they would take three more, they go two miles under ground, some of them. When I say 34 collieries I mean collieries; perhaps there are three pits, or three drawing-shafts at one of these collieries included in the 34. They will have something like 64 drawing pits that they draw coals out of, and I believe that Mr. Morton included in his report 460 collieries. I believe he did not mean collieries, but pits. I may say that there are about 64 drawing-shafts that they draw coal out of in these 34 collieries in South Yorkshire.

3547. How long do you think it would require for an inspector to survey one of those 34 collieries thoroughly?—It would take him about a day to inspect some of them thoroughly.

3548. To inspect one colliery, do you mean?—It just depends how many pits there are at that colliery; if there are three pits, probably it might take him three days; sometimes there is a north pit, a south pit, and an east pit.

3549. Then it is your opinion that if the Government were to appoint three additional inspectors for South Yorkshire, they would be quite sufficient to inspect all these collieries to the satisfaction of the working men?—Yes; and I believe that the miners would be better in their health also.

3550. Do you know what was the amount that was paid for compromising the actions for neglect of duty, when those 59 persons were killed?—In the Edmund's Main case, 1,500 *l.* was what it was compromised for; that was for about 34 or 35 widows.

3551. What would have been the expense, in your opinion, of thoroughly ventilating that colliery where the deaths occurred?—The expense would not have been very great; it would have been a few hundred pounds.

3552. There is a great margin in a "few hundred pounds;" it is of importance that we should learn from you, what, in your opinion, it would have cost the proprietors of that colliery, if they had carried out a system of ventilation as thoroughly as you think it ought to have been done?—In this instance, it would not have cost much more money; there was a pretty good power of ventilation, but there was bad management of it.

3553. Will you tell us how much, in your opinion, it would have cost, if this thorough ventilation which you require had been carried out in that colliery?—That is a question which it is very difficult to answer, when one is not immediately connected with the mine.

3554. You said, a "few hundred pounds;" would you say 500 *l.*?—Yes, I believe 500 *l.* would have ventilated the place well.

3555. Is there a strong conviction in the minds of the colliers throughout your district, that there is not sufficient inspection?—Yes; there is a very strong feeling about that.

3556. *Chairman.*] I believe that that accident happened in this way; there was a blowing with gunpowder, which set fire to some gas which was near the gunpowder?—Yes.

3557. That gas set fire to some coal, and that coal burned up till it turned the draft from the regular furnace?—Yes.

3558. It was a new furnace power which counteracted the regular furnace power of the mine, and which drew towards it all the gas in the mine?—Yes; the gas that accumulated in different parts of the mine was drawn towards this fire, and caused the explosion.

3559. And the loss of life happened from a want of sufficient warning to the men?—Yes; they ought to have been at once warned in the different parts of the mine when this took place.

3560. How long was the loss of life after the first explosion?—There would be two hours before the loss of life, after the first small quantity of gas exploded.

3561. That did no harm?—No, it did no harm; at least there was no loss of life.

3562. Were all the horses saved on that occasion?—Yes; all the horses were saved except two, and the men were not saved.

3563. Can you suggest any better mode of warning men in such a case?—There might be better modes of warning; the men would have been easily warned on that occasion by sending men to the entrance of each road or working place to rap on the doors.

3564. Setting aside the neglect in that particular case, can you suggest any better mode of warning the workmen in a mine, when anything of that kind occurs?—There might be some kind of signals put up. I have heard it suggested that a bell put at intervals, or something of that sort, might warn the men.

3565. General *Dunne.*] Could a bell be heard far enough?—A bell could be heard for a considerable distance; it depends, of course, upon the number of bells.

3566. *Chairman.*] Are you aware that, with regard to the Act which Mr. Clive asked you about, the Act of 1862, which requires a second shaft, that Act says that in both shafts distinct means of ingress and egress are to be provided for the men?—There is no particular provision made on the subject.

3567. That may be so with reference to your objection to men going up the upcast shaft; but the Act requires that there shall be means of egress provided to the men in the upcast shaft?—The Act distinctly provides, as I understand it, that there shall be two shafts, so that, in the case

case of failure at one, the men shall be able to escape by the other.

3568. One of the shafts required by that Act would be the furnace shaft?—Yes.

3569. And the Act says that there shall be means of egress at each of them?—Yes; it does not say at which of them it shall be.

3570. Are you satisfied with the competency of the viewers and deputies in regard to the ventilation?—There are some of them that are considered not to be competent.

3571. Do you hear many complaints of the incompetency of the viewers and deputies?—Yes, there are complaints that certain men are not competent; in fact, from experience of them as fellow-workmen, the men know that they are not competent.

3572. How are they paid?—They are not paid very well; there does not seem to be anything held out to them.

3573. Is it considered to be a better place than that of a working collier?—It is looked upon in this way; some of the men are very eager to get it. We have some inferior workmen, and some of the men who get in these situations do better in them than they can at the coal. Others would not care to leave the coal to go to them.

3574. Those who are good workmen would not prefer being viewers, but only those who are middling workmen?—Just so.

3575. Are there any complaints of the insufficiency of their visits; do they go round often enough?—There is too much interval between the visit of the fireman and the time of the men going to their workings. In some of our places the fireman begins going his round at one or two in the morning, and the first place he has examined has been standing five or six hours before the workmen come to it. We have places where they even commence examining them before 12 o'clock. I think that every working place ought to be examined not more than two hours or an hour and a half previous to the men going into it, at the longest.

3576. Have you anything more that you wish to say about ventilation?—In reference to the inspectors, I would like the Committee to understand that it is not merely ventilation that we want the inspectors to look at. There are other things, such as the insufficiency of the timber, and things of that description.

3577. You mean the general observance of the rules?—Yes, the general observance of the rules.

3578. The eighth general rule says, that "All underground, self-acting, and engine planes on which persons travel, are to be provided with some proper means of signalling between the stopping places and at the end of the planes, and with sufficient places of refuge at the sides of such planes, at intervals of not more than 20 yards;" has that rule, within your observation, been complied with?—No, it is not complied with at some of our places.

3579. By a self-acting plane you mean an incline, so that the full corves pull up the empty ones?—Yes; then we have engine planes also.

3580. Have you known any accident in consequence of that rule not being observed?—Although the Act says, that these escape places or places of refuge shall be made every 20 yards, we had an accident occurred about 11 months ago in an engine plane, and there was no escape place at all. The engine plane was a considerable length, and, as we are informed, there was not a single refuge place made. The consequence of that was that out of three men who were coming up, one got seriously injured, and has been in bed ever since; he got entangled, and was so much injured that he is now just at death's door, and has been 11 months in that state. That rule says that there shall be refuge places every 20 yards. If they were every 20 yards, up each side of the plane, that is to say, if they were so constructed, that there should be a refuge place every 10 yards, we think it would be much better.

3581. A man has always time to go 20 yards, has he not?—No, not always time. You cannot go so quick in a mine as you can on the surface, because it is only a fickle light.

3582. You would hear the corve coming 100 yards off, would you not?—It just depends; sometimes we might be coming up these engine planes, and we might not be 20 yards from the top, and the man at the top would not see us perhaps, and he might let the corve come down and meet us.

3583. You would suggest, at any rate, that the places of refuge should be still nearer than 20 yards?—Yes, 10 yards instead of 20.

3584. Are there proper means of signalling between the stopping-places and the engine planes, as far as you know?—In this plane, where this accident occurred, there was no proper signal.

3585. Before you went into one of these engine planes you would give a signal, to let them know at the other end that you were coming, is that the object of the signal?—The object of it is, for the engine-man to go on when the full corves are put on; the signal is purposely for the engine-man.

3586. The engine-man ought not to let the corves go till he has had the signal?—No.

3587. But in some cases, as I understand you, the obligation to have signals is not complied with?—No; it is a little expense to put a signal down, and in this case it was neglected.

3588. What sort of signal is it?—Something like the railway signals, wires and bells, and something at the end of them, or a piece of metal that will make a noise.

3589. In the case where this accident happened, there was no signal, you say?—There was a signal of some description, but no proper one.

3590. Mr. *Liddell.*] Will you name the colliery where this occurred?—Mr. Rhodes' colliery, near Sheffield, a place called "Intake."

3591. Do you know any other collieries in your district, where accidents have occurred from the want of places of refuge on the plane?—I am not aware that any accident has occurred, with the exception of what I have mentioned, at least not since I began to take a deep interest in this matter.

3592. Do the owners of collieries in your district comply, for the most part, with the rule, that these refuges shall be so placed?—There are some of the large owners who do not at all depend upon making refuge places; they drive another travelling way; and make another road altogether.

3593. Do you approve of that?—Yes, they are much better than escape places; they take the men away from the working machinery altogether.

3594. Mr. *Foster.*] You spoke of 460 collieries.

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Will you state, for the purpose of clearing up what appears to me to be a confusion, to what district you referred when you spoke of those 460 collieries?—I took it from Mr. Morton's own report made to Sir George Grey.

3595. Will you state the district?—Yorkshire, West and South.

3596. Under one inspection?—Under one inspection.

3597. When you spoke of 34 collieries, to what district, or to what part of a district did you then refer?—South Yorkshire for an area of about 7 miles.

3598. That is to say a portion of Mr. Morton's district?—Yes, a portion of it.

3599. Then the collieries now under inspection by Mr. Morton amount in number to 460?—I believe Mr. Morton put it as collieries, but I understand them to be pits. I have given you about 64 drawing pits for South Yorkshire.

3600. Have you any idea how many collieries are under Mr. Morton's inspection. Presuming that the 460 are pits, how many collieries does that number comprise?—I cannot say how many collieries that comprises, but there will be a witness to follow me, I believe, who will know that.

3601. Because the evidence you have given with respect to the number of inspectors requisite for 34 collieries is utterly irrelevant?—I said that about three more inspectors would be required.

3602. That would be, according to your own statement, only for a portion of Mr. Morton's district?—Yes, only a portion of it, and not the largest portion of it.

3603. Therefore, with respect to giving the Committee an idea how many sub-inspectors might be necessary, the 34 collieries lead to no mode of comparison whatever?—I only spoke for the immediate district that I came from.

3604. Not as to the whole of Mr. Morton's district?—No, not as to the whole of Mr. Morton's district. I think that three more in this district that I come from would carry out a good system of inspection.

3605. That you say is only a part of his district?—It is only a part of his district, and not the largest part of it.

3606. *Chairman.*] You have put in the special rules of the district; let me call your attention to No. 3. "The agent and the underground viewer shall see that an ample stock of good timber, props, bricks, lime, ropes, brattices, air-pipes, and other requisite materials is always on the premises, and that a sufficient cover overhead is provided for use when lowering or raising persons in a working pit or shaft." Are you satisfied with the working of that rule?—No.

3607. Have you anything to suggest as to the framing of the rule?—We have no objection to anything that is in that rule with the exception of "on the premises." The premises are supposed to be anything within 50 or 60 or 100 yards from the pit's top, but probably that will be a mile and a half from the man's working place; and some of the miners are put to great inconvenience in consequence of having to carry their timber from the premises in order to make themselves safe during the working hours of the day, and then to send it down and convey it in the best manner they possibly can to the working place.

3608. Are they expected to convey it themselves?—It has to be done so in some cases, otherwise they do not get the supply. In other collieries they take it to the pass-byes and have a constant supply kept up, and the men can go for it immediately.

3609. What is a pass-bye?—A pass-bye is a siding that the hurrier comes to, and takes his full corve and brings the empty one away again; and when the collier wants wood, he takes wood from the pass-bye for him.

3610. Have many accidents happened within your knowledge from the want of a sufficient propping?—Yes; we have had one reported within this fortnight that has happened from the want of a sufficient system of propping.

3611. Was it from the want of a sufficient supply of props, or from the want of a sufficient use of the props?—For want of a sufficient supply of props; that is the men's statement.

3612. Within proper distance you mean?—There were no props at all that were anywhere near them. I have here a letter which came to me on the 10th of March from this colliery where the accident occurred, owing to the want of sufficient props.

3613. There was an inquest in that case was not there?—Yes.

3614. What was the verdict?—Accidental death.

3615. Did the inspector attend?—No.

3616. Do you know that the inspector did not attend?—I made special inquiry whether he attended or not. The report simply says that there have been two accidents within this month, and that is one of them.

3617. Was there an inquest in the other case also?—Yes.

3618. What was the verdict in that other case?—Accidental death in both cases.

3619. Did the inspector attend in either case?—In neither case.

3620. You know that, do you?—I know it.

3621. Was the man from whom you received the letter to which you have referred summoned at either inquest?—No.

3622. Did he attend without being summoned? No.

3623. Will you ascertain the dates of those inquests, and the paper in which they were reported?—Yes. The first inquest was held on the 28th of February 1866, and reported in the "Rotherham and Masbro' Advertiser," of 3d March 1866. The second inquest on the second accident was held on the 16th of March 1866, and reported in the "Sheffield and Rotherham Independent," of 17th March 1866. No inspector of mines was present on either inquest.

3624. General *Dunne.*] Are the special rules by law required to be put up at every pit?—Yes, I do not know that there are any pits without special rules.

3625. That provision is complied with then?—Yes.

3626. Sir *Philip Egerton.*] Do you consider that the workmen are sometimes neglectful as to putting up the props when they are supplied to them?—Yes, sometimes.

3627. Some of them are rather reckless, and carry on their work at hazard in reference to putting up those props?—Yes, some of them need more attention than others.

3628. *Chairman.*] In a case of want of propping one workman is likely to suffer from the neglect

neglect of another, is not he?—Yes, in some cases we have three or four men working into one bank, and the neglect of any one workman might destroy the lives of two or three others.

3629. Is there any other special point upon which you wish to say anything?—There are several alterations that we would desire in the special rules; little alterations I mean, for instance, in No. 9 and No. 13; they seem to go together.

3630. Mr. *Bruce.*] These are your own special rules that you are referring to?—Yes; each district, as I understand, has its own special rules. The Special Rule, No. 9, says: "The underground viewer or his deputy shall (with a safety-lamp) daily examine every travelling road and working place, before the miners and boys descend," and so on. I have spoken to that point, I think, already, and pointed out that they are examined too soon; that many of the places are too long vacant.

3631. *Chairman.*] Have the workmen sufficient opportunity of seeing what the special rules are before they are sent to the Secretary of State?—I cannot speak exactly as to where these were put when they were sent to the Secretary of State; I heard of their being up at some places. But we think that it would be much better if some one to represent the miners was to be present at the making of the rules before they were sanctioned.

3632. Not merely that they should be made, and then put up, but that before they were framed the miners should in some way or other be consulted?—Yes, that they should have a voice in them.

3633. And, in consequence of the miners not being consulted, you think that the special rules are in some respects defective?—Yes.

3634. And you have specially mentioned the 9th?—Yes, the 9th and the 13th go nearly together; then there is the 17th special rule.

3635. The 17th special rule is, that "The underground viewer, or his deputy, must see that door-keepers are appointed (where needful) to open and shut the doors, and he must not allow a door-keeper to leave a door until the day's work or night's work is finished, or until another person is appointed to take care of the door." What is the fault that you find with that rule?—The only fault that we find with that rule is, that it says that door-keepers are to be appointed "where needful." We think it ought to say, where hurriers have to pass through the doors, because the managers put the door-trapping in many of the mines on the hurriers. I have seen the hurriers passing through two or three doors in a very short distance, and there has been no door-keeper at all.

3636. You think that wherever there is a door there should be a door-keeper?—Where hurriers have to pass through them.

3637. You would not leave it to the hurriers to act as door-keepers?—No, it is too much responsibility for them.

3638. Sir *Philip Egerton.*] Have you sometimes swing doors?—Yes, but they are not always kept in repair. We have hurriers by the piece in many of the mines, and they want to get them open as fast as possible, and then they prop them open, and then perhaps there has been a dispute as to who went through the door last.

3639. *Chairman.*] You propose to leave out the words "where needful" from that 17th rule?—Yes, and to insert "where hurriers have to pass through the doors."

3640. Is there any other rule which you have to find fault with?—There is the 25th.

3641. The 25th special rule is, that "The miners must build good pack walls, and set a sufficient quantity of props and bars for safely supporting the roof, and add to them or renew them when necessary, or when told by the underground viewer, or the deputy;" what fault do you find with that rule?—I think it would be better if it commenced as the other rule commences, "The underground viewer or his deputy," because it is not the miner's work in some of our mines to build pack walls at all.

3642. You think that ought not to be thrown upon the miners at all, but to be done by the viewers or deputies?—Yes, the only objection is, that it says the miners, instead of the underground viewer.

3643. Then would you not have the miners have anything to do with propping the roof themselves?—Yes; the rule says, "the miners must build good pack walls." In some of our mines it is done in this way: other men build the walls, but the miners set the props. It says here, "the miners must build," but probably it is not the miner's place, because it is another contract altogether.

3644. Then you object to that rule, and think that it should be left to contract?—I object to "miners," because it is not the miner's work in some parts to build walls.

3645. You do not object to it if it is in their contract?—No.

3646. You do not object to the miners contracting to build the walls at all, as I understand?—No.

3647. In fact you rather prefer it, do not you?—As a practical miner I always like to keep my place in a proper state.

3648. If you were a practical miner now, you would rather have the building of the wall and the setting of the props yourself?—Yes.

3649. Mr. *Bruce.*] That would enter into consideration in estimating the amount of pay, would it not?—They generally allow so much per yard for building the pack wall, and if the collier does not do it, some one else must do it.

3650. *Chairman.*] Is there any other special rule to which you would refer?—I have to say this, on behalf of the men employed in the district where I come from, that all those of them who can read rules, and know what they are, consider it better that the general rules, and the special rules, and the contract rules, should be entirely distinct one from the other. Sometimes the contract rules interfere with the special rules, and if they were submitted to the proper authorities before they became law, I think those authorities would see that one code of rules did not evade the other.

3651. You would not submit the contract rules to that authority, would you?—I think the contract rules sometimes interfere with special rules.

3652. Mr. *Bruce.*] You would have it provided by Act of Parliament, that wherever the special rules and the contract rules differed, the contract rules should give way to the special rules, and the special rules should be the law?—The special rules should be the law so far as they were meant for it, and the contract rules should not interfere with them. I know that, in some

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cases, the general rules, and the contract rules, and the special rules, are all printed in one book, and the miner when he is engaged, has that book put into his hand and signs it, and when he opens it he finds what it contains; he does not know at first what the rules are. For instance, the law says that the coal shall be truly weighed; but there is one of the contract rules in our district that says that if a corf is not full enough the miner loses it; that is a case in which the contract rules interfere with the law.

3653. Mr. *Bruce.*] How long are your contracts for?—The contract is a month.

3654. You are always able at the end of the month, if you find that there is anything in the contract you have signed which you had not observed, to put it to rights by giving notice?—It often leads to a strike to put anything right of that description.

3655. *Chairman.*] You think, as I understand it, that some care should be taken that the contract rules are not made inconsistent with the general rules, or the special rules?—That is it.

3656. And that the contract rules accordingly should be subject to some approbation?—Yes.

3657. To the approbation of the inspector?—The contract rules should be agreed upon between the workmen and the employer, and then submitted to a stipendiary magistrate, or some one well versed in the special rules and the general rules, and who would see that they did not interfere with the other rules.

3658. I understand you to say, that in some instances the contract rule is an infringement of the general rule?—Yes; I think if they were properly inspected and revised, all three codes of them would stand.

3659. Mr. *Liddell.*] Supposing that a man breaks a contract rule, the employer has the power of bringing him before the nearest bench of magistrates for breach of that contract, has he not?—Yes.

3660. Or the man can bring the employer before that bench of magistrates, equally for breaking the contract on his side?—It all depends on how the man and the employer have made the contract; some contracts are made very one-sided, and some are not. Some of the men look at what they do sign before they sign it.

3661. You do not mean the Committee to understand, that a man has no remedy at law against his master for a breach of contract, do you?—In some instances he has, but not in others.

3662. Will you state in what instances he has not?—For instance in the yardage and tonnage; I agree, say, to drive a place at so much per yard. The price is not stated in the rules, but it is simply a verbal agreement, and they often object to give us any written agreement or printed agreement as to the terms of wages and so on. There is scarcely one coal-owner in ten that will do it; and if we say that he has given us short payment or anything of that kind, he says simply this, "If you do not like it, you can give a month's notice."

3663. Sir *Philip Egerton.*] There is no proof of the contract, you mean?—No, there is no proof; they do not state those things in the rules; for instance, in the case of injuring a lamp, they fine the man, or otherwise take him before the magistrate. We would rather be taken before the magistrate, and be fined there, than have the money stopped in the office. We think that the proper way of punishing any of us is to take us before the magistrate.

3664. *Chairman.*] And the contract rules have, in some cases, subjected the workmen to a fine, as I understand you?—At many of the collieries, every rule winds up with a fine of 5*s.* or 10*s.*

3665. And you think that, wherever there is a fine, it should be settled not by the contract, but by the special rules?—I think it should be settled by the law, when a man is punished.

3666. Mr. *Liddell.*] In the event of a fine being inflicted, and a man refusing to pay that fine, I understand you to say that you think a man should be at liberty to take that case into a court of justice?—I think that, if a man does wrong, the owner should not have any power to fine him at all, but should take him before the magistrate at once.

3667. In breach of his contract?—For breach of his contract, or breach of the rules.

3668. General *Dunne.*] Cannot the man be punished in another way besides fining him; is there any punishment that can be inflicted?—When any one of the men is taken before the magistrate for injuring, say a safety lamp, or for any violation of the rules, by leaving doors open, or so on, sometimes the magistrate will levy a fine, and sometimes he will give him two or three months' imprisonment.

3669. He can send him to prison then?—Yes; I have known cases when a man has neglected his duty, and the managers have said "Well, you will be fined 10*s.* for this neglect, and if you do not like it we will take you before the magistrate," and before the man would go before the magistrate he has paid the 10*s.* fine. But I say that I would rather go before the magistrate for any neglect than be fined 10*s.* in such manner.

3670. Is the being put in prison the alternative to a fine, that is to say, is it merely in default of paying a fine?—No; sometimes the magistrate will not give a man the option to pay a fine at all.

3671. Mr. *Liddell.*] The South Yorkshire colliers are a very well-conducted class of men for the most part, are they not?—There are a great many of them very respectable men, and well conducted.

3672. And their habits are very provident and prudent?—Yes, there are a great many who are of that character.

3673. Are there not cases in which they have actually among themselves, from their own savings and earnings, built the village?—They have built a great many houses in the village, in many cases.

3674. And many of the workmen own two or three houses themselves a piece?—Yes, many.

3675. For which they receive considerable rents?—The rents of the district, 2*s.* and 3*s.* a week.

3676. Their houses are very well furnished, and in a very comfortable manner for the most part, are they not?—Yes, all the cottages in the country are better furnished than those in the towns for the most part.

3677. And I believe it is not uncommon not only to find the rooms comfortably carpeted and furnished, but even to find a pianoforte in the house?—Yes, in some cases; and sometimes there is a good fat pig in the house as well.

3678. And the young ladies learn the pianoforte, I suppose?—There might not be so many young ladies, but some of the miners' daughters learn

learn the pianoforte, and the young men too play the pianoforte and the harmonium.

3679. And some of them do a little gardening, do they not?—Yes.

3680. It is altogether a thriving population?—Yes, it is.

3681. Mr. *Powell.*] Is the population of the South Yorkshire district a settled population; does it consist of those born in the district or of those gathered from various counties in England?—A great many have come into it from other parts within these last seven or eight years, but I may say that the great bulk of the miners that I am acquainted with are Yorkshiremen.

3682. *Chairman.*] Is there anything else which you wish to state to the Committee?—In reference to wages being paid weekly, I may say that we have asked for several years in South Yorkshire to have the wages of the miners paid weekly, but, up to three months ago, they have refused; within the last three months the employers have agreed to pay the miners' wages weekly.

3683. Mr. *Bruce.*] How were they paying the wages before?—Fortnightly.

3684. When they paid once a fortnight, was there any payment made in the intervening week?—In about two or three places out of the 34 collieries they did pay on account weekly.

3685. *Chairman.*] What is the effect of this weekly payment; is the effect good?—It appears to be very good. We have only had experience of it for three or four months, but it appears to work well both for employer and for employed.

3686. Does it lead to more holidays?—It leads to less holidays.

3687. Does it lead to more half days on Saturdays?—There are no half Saturdays at all in those cases.

3688. Do they take the play Monday?—The bulk of them have abandoned the play Monday.

3689. Where they have the play Monday, it is every other Monday?—Yes; even if they take a Monday now, it is only every other Monday.

3690. The weekly payment has led to the disuse rather of the play Monday, as I understand you?—Yes.

3691. Mr. *Bruce.*] Do I rightly understand you to say that you would like a clause in the Act of Parliament compelling all the employers of colliers to pay them once a week?—So far as we are concerned, we do not think so much about the Legislature stepping in to interfere with that; but we think that if all employers would look at the example of South Yorkshire, they would find it greatly for their advantage. We have tried how it will work, and we have produced hundreds of tons more coal in six weeks' time than we did before; steadier habits of working do away with play Mondays and half Saturdays as well. We have only eight hours of labour per day, it must be remembered.

3692. *Chairman.*] Is there anything of the truck system in South Yorkshire?—In some places there are many stoppages; but a great many of the stoppages the men consent to willingly. For instance, as to rents, they do not object to rents being stopped; but the greatest objection they have is to stoppages in the way of fines and clubs; having to pay, for example, so much per week for a club at the pay office.

3693. Sir *Philip Egerton.*] Accident clubs, you mean?—Yes, accident clubs; they would rather have them in their own hands, and conduct them themselves.

3694. Mr. *Bruce.*] The employers do not usually, as I understand you, keep shops for the sale of provisions?—There are no shops for the sale of provisions at all, with us.

3695. *Chairman.*] Are the men compelled to get their tools from their employers, in any case?—They are not compelled.

3696. Do the managers of mines generally provide for the sharpening of the tools?—The sharpening of the tools at a great many places is paid for by the men. Sometimes they employ men of their own, and in some places the employer finds the sharpener, and stops so much a week out of the men's wages to pay him.

3697. Is it supposed that the employer makes any gain out of that?—It is supposed that there is gain to them where powder and candles are supplied, and in some cases from sharpening.

3698. Mr. *Bruce.*] Do some of the employers publish an account of the receipts and expenditure of the clubs?—They do not publish them in a printed form; but some of them will allow two or three miners to be a committee on the men's side.

3699. *Chairman.*] Is there dissatisfaction about the club money being kept in the hands of the masters?—Yes.

3700. And is that an idea that the masters make a profit out of it?—They never have any account printed.

3701. Mr. *Liddell.*] Your provident funds are in general operation, are they not, and well kept up?—Yes; we are paying now, for accidents and sickness, from the association more than 100 *l.* a week.

3702. Is it not in contemplation to establish a fund to provide for the widows and children of miners who lose their lives?—We have that in operation. If a woman is left a widow in consequence of her husband getting killed in the mine we allow her 5*s.* a week for 12 months if she continues a widow and conducts herself well, and 1*s.* a week for each child under 12 years of age; we also have in contemplation the supporting of old miners. We do not like the very name, to say nothing of the sight, of the union workhouse; we want to establish funds of our own; we allow 8*s.* a week for accidents. If a member loses his life in the mine we pay the widow 8*l.*, and if he dies a natural death we pay her 4*l.*, and as we get the men to understand paying, we extend the benefit.

3703. *Chairman.*] That is under the management of the men, is it not?—The men themselves entirely.

3704. It has nothing to do with the funds of the pit?—It has nothing to do with the funds of the pit. We have, of course, kept bringing down the funds which have been in the hands of the managers by the establishment of these funds of our own, because the men have found out that they can manage their own affairs.

3705. Mr. *Bruce.*] What benefits do you derive from the club money that remains in the masters' hands?—The men have not so much per week from that fund as they have from ours; only about 5*s.* per week. I remember paying to a fund that they had at the office, and we had 5*s.* a week in case of accident, and we took it into our own hands and were able to pay 8*s.* a week with the same weekly payments when it was managed by ourselves. And we saved money too; we saved 50*l.* the first year, and there were about 300 of us belonging to that.

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3706. *Chairman.*] In that case you took it entirely out of the hands of the masters?—Yes, we agitated for it several times; we asked them 12 months before to let us take it into our own hands. Now we have it, and we employ a doctor.

3707. Mr. *Liddell.*] Have you any co-operative society among you?—There are co-operative societies in our neighbourhood, and many of the miners are members of the co-operative stores.

3708. *Chairman.*] Have you anything else which you wish to state to the Committee?—We think that there might be a better system of coroners' inquests established to inquire into the mine accidents, if the Government could assist in any way in that. We have often seen men killed in our mines, and the 12 jurymen have been composed of shopkeepers and small tradesmen in the town, in fact any body but a miner, and they have not been able to give a verdict in accordance with the evidence, because they are men that do not know anything at all about the working of a mine. We think, therefore, that there might be a better system established. Some of us say that half the jury should be working miners, or that, at all events, there should be a few working miners on it. There might be something done, we believe, to establish a better system for inquiring into the accidents that happen.

3709. Mr. *Bruce.*] There is nothing to prevent a miner being summoned on an inquest, is there?—A miner is not summoned one time in 20.

3710. Who summons him?—The policeman.

3711. He serves the summons, but who issues the summons?—The coroner.

3712. And it is for the coroner to select the jury, in order to see that the question is fairly inquired into?—Yes; I believe the coroner and the policeman have it all in their hands.

3713. *Chairman.*] You said something about stipendiary magistrates in a former part of your evidence; is there any feeling in favour of stipendiary magistrates among the miners?—We have not one in Barnsley, but if we had one, I think he would be very useful, not only for such cases as I have mentioned, but for other cases as well.

3714. Have you anything further to say about the coroners' inquests?—I do not know that I can say anything more; we would like a change made.

3715. There is a general dissatisfaction with the present system?—There is very much dissatisfaction about that.

3716. And you mentioned an instance, I think, before, in which there had been a verdict of accidental death, and yet you afterwards recovered 1,500 *l.*?—Yes.

Monday, 30*th April*, 1866.

MEMBERS PRESENT:

Mr. Clive.	Mr. Kinnaird.
General Dunne.	Mr. Liddell.
Sir Philip Egerton.	Mr. Neate.
Mr. Wm. Orme Foster.	Mr. Woods.
Mr. Greenall.	

CHARLES NEATE, Esq., IN THE CHAIR.

Mr. THOMAS MOTTERSHAW, called in; and Examined.

3717. *Chairman.*] WHAT are you?—A Coal Miner.

3718. How long have you been a miner?—I have been a miner 27 years.

3719. At what age did you begin?—I began at six years of age.

3720. Where do you work now?—I work at Stanley Colliery. The proprietors are Mr. Robert Hudson & Company.

3721. What district is that in?—The Wakefield and Methley district.

3722. How long have you worked there?—Twenty-seven years, with the exception of three years, at intervals.

3723. You have been at the same colliery, then, all your life?—Ever since I was a boy.

3724. What do you chiefly wish to give evidence about?—On the whole system I should like to give evidence.

3725. Are there many boys employed in that district—Yes.

3726. How many men are employed in the colliery where you work?—In the colliery where I work I think there will be somewhere about 300 men employed.

3727. And how many boys?—About 160, or perhaps 170.

3728. Up to what age do you call them boys?—From 12 years to 18.

3729. How many would there be from 12 to 14 years of age?—I cannot exactly say; but perhaps about 40.

3730. Are there any boys under 12 years old?—Very few under 12.

3731. Has there been any change in that respect since the Act of 1860?—I believe that up to 1860 the boys were admitted into the mines at 10 years of age; but since 1860 or 1861 the boys have not been admitted into the mines under 12, except they can read and write.

3732. Then the directions of the Act have been generally complied with?—Yes, with few exceptions.

3733. Do the boys go to school between the ages of 10 and 12?—Yes. When the boys do not go to the mines in the immediate neighbourhood where I live, they generally do go to school; the fathers send them to school.

3734. What is the number of hours that the boys work?—From eight hours to about 11 hours; on the average we might say 10 hours.

3735. When do they begin working; what time do they go down into the mine?—From half-past five to six in the morning.

3736. And they stay upon the average 10 hours, you say?—Yes.

3737. What are the hours of the men on the average?—Just about the same.

3738. Do not the boys stay after the men?—No, not in the mine I work at; only I should say this, that as to the day boys, the master finds the boys; he contracts at so much per dozen; that is to say, at 16 corves a dozen, because we call 16 a dozen; their work is done by dozens.

3739. You say that they work by contract; whom do they make the contract with?—When there is an alteration in the price of labour, the boys make a contract with the employer.

3740. Confining ourselves to boys between 12 and 14, what is the work that those boys do?—Some of them are hurriers, and some of them are engaged in coupling, that is to say, linking the tubs to one another by coupling chains; and some drive the ponies.

3741. After 12 years of age, do they go to school at all?—I cannot say about that.

3742. But between the ages of 10 and 12, do they go to school?—Yes; they are not admitted into the mine where I work under 12 if they cannot read or write; but they do not generally go to school when they come to the mine, because they are not admitted till they are 12.

3743. Have you any alteration to suggest about the boys?—We wish that the boys should be prohibited from going into the mines on any occasion under 12.

3744. With regard to boys over 12, would you make any special rules about them as to the time of working?—Yes, that they should not work above eight hours, up to 14 years of age.

3745. Would you make any provision for their schooling between the ages of 12 and 14, or would you leave that to their parents?—If they went four or five days a-week for two hours of school, that would do I think.

3746. How is that district provided with schools?—Very fairly in the immediate neighbourhood where I live.

3747. You say that the boys are chiefly employed by the master?—Yes, at the colliery where I work. There are other collieries in the neighbourhood where the men find their own boys, except it be in pony driving, or coupling the corves, where occasionally it might be different.

3748. But where they employ the boys as hurriers, they employ their own boys?—Yes.

3749. Are there any women employed?—Not

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in the immediate district; at least not in the principal and most respectable collieries.

3750. Is that from the unwillingness of the masters to employ them?—Yes.

3751. Would the colliers be willing that the women should be employed if the masters did not object?—The general feeling of the men is that the women should be prohibited from working on the pit bank.

3752. Mr. *Liddell.*] You say that the boys are employed chiefly in coupling the corves, and in driving ponies?—Yes; when a boy first enters into the mine at the age of 12, at the colliery where I work at Messrs. Hudson & Company. Very few are admitted under 12 years of age.

3753. But when they are employed between 12 and 14, they are chiefly employed in coupling the corves and driving the ponies?—Yes, with some exceptions.

3754. But are they employed in attending to the doors?—We have very few doors in the mine at all. I think it would be beneficial that doors should be prohibited altogether.

3755. There are some doors, I gather from you; who attends to those doors?—The doors are swing-doors that swing by themselves.

3756. Mr. *Greenall.*] Have you any boys of your own employed in the mine?—No.

3757. Is there a sufficient supply of boys?—Sometimes there is a scarcity.

3758. With regard to the men employed in the place of women, what rate of wages do they get?—The wages of the boys run from 2 *s.* to 2 *s.* 6 *d.* a-day, but the linkers who go into the mine at the age of 12 will get from 4 *s.* to 7 *s.* a-week.

3759. I am speaking of the men who do that work in your district which women do in other districts, and I want to know the rate of wages which men so employed get?—I do not quite understand the question.

3760. In some districts women are employed on the tops?—Yes.

3761. They are not so employed in your neighbourhood?—Not in the immediate neighbourhood.

3762. What are the wages which the men get who are employed in your district as women are in other districts?—I do not know; perhaps they might be 18 *s.* a-week, perhaps a pound, I cannot speak exactly.

3763. *Chairman.*] You said, did you not, that they did not use doors much at the colliery where you work?—There are very few doors used at present. Formerly there used to be a great many doors, according to the construction of the work; in some parts of the mine, three or four years since, they had what we call long hooks.

3764. What doors there are are swing-doors, you say?—Yes.

3765. Are they generally in good order; do they swing well?—Yes, generally; I have seen them when they have been defective.

3766. When the hurriers have to open and shut the doors, do they attend to that duty properly?—I have not known any person attend to opening the doors (I mean in the way of its being his work to attend to the doors) these 20 years, in that colliery. If a door is properly hung, a boy, when he is going through the door, will have to be very quick if it does not catch him.

3767. But if it does catch him it will not hurt him, will it?—It all depends.

3768. If it is a heavy door, and if there is a great draught of air, it may?—Yes; it shuts very rapidly.

3769. You would like to do without doors, I understand you?—I say that it is the most beneficial ventilation to do without doors.

3770. How would you ventilate without doors?—By letting the air go in at the commencement of the work. I have a plan here which will show what I mean.

3771. You have given your attention to ventilation, have you?—Yes.

3772. Have you ever been a viewer?—No, but I have studied the works.

3773. Will you explain how you would turn the current of air up into a side-working, without stopping it by a door in the main air-way?—It must be borne in mind that all mines will not allow of one mode of carrying it out.

3774. Are the mines which you are speaking of deep mines?—Yes.

3775. How deep?—Two hundred and seventy yards.

3776. Are they wide mines; is the acreage great?—Yes, in some cases it is.

3777. What would be the greatest distance of the working face from the foot of the shaft in the mines which you are speaking of?—We have gone as far as half a mile or three-quarters of a mile.

3778. You are speaking of mines under 300 yards in depth, and that do not extend above 1,000 yards from the foot of the shaft?—Not more than that where I have worked; perhaps they might extend half a mile; I will not speak exactly as to that.

3779. What is the thickness of the seam?—A yard and eight inches it will run, or perhaps a yard and six inches; that will be the average thickness.

3780. Is that plan which you have in your hand a plan of any particular mine?—No, it just shows my own views (*the Witness explained the plan to the Committee*). I would divide this area (*pointing to the plan*), so that an equal amount of air can come up here, and up here without having a door, by putting a regulator here, and another here. Supposing there is 40,000 feet of air going up here (*pointing to the plan*), I put a regulator here so as to obstruct the air-courses, so that the natural pressure will only allow 20,000 feet to go each way.

3781. That regulator is a sort of half-door?—Just so; it is not a door that we have to go travelling through.

3782. It is a fixed construction to divide the current?—Yes.

3783. Do you know any mine in your district which is ventilated without doors, by splitting the current in that way?—Yes, I do; I know two or three collieries worked upon this principle; I do not mean exactly in the way of working the set work, but in working the collieries entirely without doors, excepting the furnace doors.

3784. What are those collieries?—In Mr. Charlesworth's, of Robin Hood, near Wakefield, that plan is followed, with the exception, as I say, of the furnace doors; there might be a door which leads into the return air-courses, but which is not a door for men and boys to travel through.

3785. What other mine can you mention?—I believe Pope's and Pearson's is one of that sort.

3786. Do you speak from your own knowledge?

ledge?—When I worked in that mine, it was so.

3787. When you were working at Pope's and Pearson's it was ventilated without doors; is that so?—Without doors, excepting the furnace door and places where the deputy had occasion to go into the back return courses.

3788. Was that well ventilated?—Yes.

3789. Were there any accidents there, during the time that you were there, from want of ventilation?—When I was working there there was one.

3790. Arising from explosion?—Yes.

3791. How long did you work there?—I think it was in 1860 when I was working there. I worked there about a year and a-half.

3792. That accident arose from defective ventilation, did it?—It arose in this way: The person who got burnt was working in a heading, or what we call an ending. There was a pair of endings, and the person who got burnt was driving a slit (the slits were driven every 10 yards) and the slit would be four and a-half or five yards thick, and the ending that he drove into was filled with gas, and he went into the place with his candle as soon as ever he made an opening, and it exploded on him.

3793. Was this a disused ending that he worked into?—No; it was an ending which another person was working into, but not at that very time. He was playing then; perhaps he had been playing for a week.

3794. By "playing," you mean that he was taking a holiday?—Yes.

3795. And during his absence the gas had accumulated from the ventilation not having been attended to?—Yes.

3796. If the man had been working there he would have seen to the ventilation going on properly?—Yes.

3797. Mr. *Liddell.*] But had this place not been visited by the fireman?—I cannot speak of that. I was working perhaps 200 yards from it. I saw the person when he was coming out burnt. It was at night, when we were just going to leave our work.

3798. *Chairman.*] Speaking from your experience of the mines that you have seen, is the duty of firemen well performed?—No, I believe not.

3799. What are the rules as to the rounds of the fireman in the mines where you have been employed; at what time would he begin?—At various times, according to the extent of the mine.

3800. At what time does he set out to go his round in the mine where you are in now?—Perhaps at two o'clock in the morning.

3801. And at what time will he have finished his round?—Somewhere about five.

3802. So that there would not be more than three or four hours' interval between the time of the fireman going his round and the time of the miner beginning his work?—It depends upon the extent of the mine; if there are very extensive works to go through, perhaps he will begin at 10 or 11 at night.

3803. Is there a sufficiency of firemen to do the work in the mine where you are employed?—In the mine where I work there are two; that is a sufficiency as far as the number goes.

3804. Speaking generally and without reference to those two men, should you say that the firemen that are employed are generally competent?—I believe not.

3805. How are they paid?—From 4*s.* 6*d.* to 5*s.*; at the mine where I work the average is 4*s.* 8*d.*

3806. And what do the men ordinarily get by their average work; in short, is it a better thing to be a fireman than to be a working collier?—No.

3807. By the fireman, you mean the man who goes the rounds, do not you?—Yes.

3808. Who is there to see that the fireman does his work properly?—I should know in the morning when I went to my work if the fireman had not been, and I should see it myself if he had not done his work properly.

3809. You would report it to whom?—I should report it to the viewer.

3810. Does the viewer also occasionally go the rounds to see that the fireman has done his duty?—He goes round during the day.

3811. Mr. *Liddell.*] In reference to this accident in which the man was burnt, you stated, did you not, that you would know, on arriving at your work in the morning, whether the fireman had been there or not by the condition of the atmosphere?—Not only that, but he would leave a certain mark; for instance, the day of the month upon the shovel, or somewhere else; but I should not let this mark satisfy me; I should test my work myself.

3812. You would test the state of the ventilation yourself?—Yes, I would test the state of the ventilation myself, to see whether the gas had accumulated or not.

3813. Will you tell us what test you would apply in order to ascertain the state of the ventilation?—I should take my lamp, and go and examine the workings where I had to work; I should have an ordinary light in my lamp, and hold it all over the place, so as to see if it would show any signs of gas; and if it would not show any signs of gas, I should know that my work was generally safe.

3814. Mr. *Woods.*] What signs of gas will the light show?—It will draw the wick or the flame up when there is gas.

3815. Mr. *Liddell.*] Do you imagine that that workman who was burnt had applied this test on arriving at his work in the morning?—It was the night when he got burnt.

3816. But that would not have prevented him from applying the test, would it?—It was not in his work; there are two endings, as we call them in West Yorkshire, and every 10 yards in that pit they drove what we call a slit through for admitting the ventilation, so that the air could go forwards and upwards through this slit.

3817. Do I rightly understand you that, in the course of his work, this workman drove into a place which had been abandoned, and in which a collection of gas had taken place?—It happened in this way: they ought to have had brattices up into this place, where there was no working, and where this man got burnt; he holed into this place, and there was gas accumulated; he had previously been working with his lamp, and a few minutes after he had made the road through, he took his candle, and went through the road with it; it was his own neglect.

3818. Then, according to that statement, it was due to two circumstances; one was that he drove into a place in which an accumulation of gas had taken place; and the other circumstance

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was that he was using a bare light in place of his lamp?—Yes.

3819. Consequently the accident occurred, not so much from the want of ventilation, as from the carelessness of the man?—But if the work had been properly constructed with brattices there would not have been an accumulation of gas. If the man had not gone in with a naked light the lamp would have showed signs by which he might have been restrained from going into it.

3820. It was, in fact, the carelessness of the man going into this place with the bare flame in place of the Davy lamp which caused the explosion?—Upon that particular occasion it was; but if the place had been properly bratticed up there would have been no accumulation of gas; there was a possibility of keeping it bratticed so that the gas could not accumulate.

3821. Mr. *Woods.*] With regard to this plan which you have exhibited to the Committee, I understood you to say that it is not a plan of any existing colliery?—Not in respect to the whole of it, as to the set workings, for instance; but there are certain collieries operating upon the same principle.

3822. Then this is not a plan of any colliery which exists at the present time?—No.

3823. Do not the faults intervening in a mine greatly interfere with the plan of ventilation?—No, I cannot say that they do.

3824. Why do the employers put doors at all if they can be dispensed with?—It was through a lack of knowledge, I believe, and owing to the circumstance that every manager does not think that it is necessary to do without doors.

3825. But if a door be placed; it is an expensive thing, I apprehend, to place it and to maintain it in good condition; it costs money, in fact, to have a door?—Yes.

3826. And it costs money to tend a door?—Yes.

3827. Then one would think there must be a necessity for doors before the owners of the colliery will have doors?—I believe it is from lack of knowledge; in fact, there are miners in West Yorkshire, who are men eminent for constructing the mines, who do not believe in doors any more than I do.

3828. Then you do not think that the fact of the irregularities of the mine isolating different portions of the mine from one another adds to the difficulty of the plan of ventilation?—No, I do not.

3829. You have been asked about the time of the firemen going down; is it the custom in any collieries for firemen to go down at night, after the men come up, to watch over the ventilation, and to see that all the doors are shut?—In some parts of the colliery where I work they go down at nine o'clock at night, and in some of the pits they go down at two or three o'clock, according to the extensiveness of the mine.

3830. With regard to the work of the men that are laying roads and doing such like work, is not that often done in the night?—Yes, that is what we call by-work.

3831. Then the maintaining of the roads tends to having men all the 24 hours round, does it not, in a large colliery?—No.

3832. But they are often down in the night?—Not as a general thing.

3833. The furnace men must be down in the night?—Yes.

3834. As to the insalubrity of the ventilation of the mines, is it not a common thing for the horses that live down below to have very smooth and beautiful coats?—It is; I have often noticed that myself.

3835. And so far as the horses are concerned, and in those parts of the mine to which the horses go, there is not a deficiency of ventilation so far as their health is concerned?—No, I believe not.

3836. Is there a deficiency of ventilation for the health of the men in the parts of the mine that the horses do not go to?—Yes, I believe there is.

3837. Those are mines that abound much in gas?—Yes.

3838. With regard to those mines that abound much in explosive gas, do not the men sometimes complain of too much air, and being cold at their work?—I heard the men complain of that, but that is no reason why the ventilation should be bad.

3839. But, as a matter of fact, you have heard the men complain of too much air?—Not as a general thing.

3840. With regard to the mode of testing the gas, did you not explain that the presence of gas could be tested by the lamp?—Yes.

3841. How does it show itself in the lamp?—I have tried it in various ways. First, when I go into the mine in the morning, if I have any suspicion of gas, I take my lamp, and I bring it into the mine like this (*describing it*), and if there is gas, to a certain extent it will draw the flame in the lamp.

3842. It elongates the flame in the lamp?—It enlarges it.

3843. Is it very much enlarged?—Sometimes. If there is not very much gas it will just raise the flame; but if there is much gas it will draw it up quick, and will cause a flap.

3844. It will cause a small explosion inside the lamp if there is very much gas?—Yes.

3845. What would be the course for a man to adopt in such a case?—To put a board up marked "fire," or to put a pair of rails up.

3846. I mean what would be the right course for the collier to adopt?—He should leave his work and report it.

3847. That would be his duty, would it?—Yes.

3848. Had that man to whom you have referred, who went through into another place—a disused place—any work to do there?—No, only this; that if there was nobody to meet him in the slit, it would be easier for him to finish his work if he went out on the other side.

3849. In large collieries the viewer and the underlooker are both over the fireman, are they not?—Yes; what we call the deputies and the under-viewers.

3850. In the smaller collieries the deputies only are over the fireman?—Yes.

3851. Would it be right to describe the management of a colliery as being of this kind, first there are the topmen, who work at the top?—Yes.

3852. Then there are what are called the pitmen, who attend to the pumps and the water?—Yes.

3853. Then there are a number of men at the bottom of the pit called the hookers on?—Yes.

3854. Then there are a number of men who mend

mend the roads?—Yes; what we commonly call by-workmen.

3855. Then there is a set of men who attend entirely to the ventilation, and who are called firemen?—Yes.

3856. And all these different gangs of men are under the chief managers?—Yes; what we call the head viewers.

3857. Each set of men attending to their own work?—Yes.

3858. Then there come the colliers and the drawers?—Yes.

3859. *Chairman.*] You do not conceive that the system of doors is cheaper than the system of ventilation which you recommend, do you?—The doors are dearer.

3860. Therefore it is not out of economy that the system of doors is adopted?—No.

3861. Have you anything to suggest with reference to testing the capacity of the firemen?—We wish that the firemen should be subject to a scientific examination.

3862. You think that in some instances they are unfit for their work from want of knowledge, do you?—Yes; I have heard of cases where a fireman, when he has been shown gas, did not know what was gas. Sometimes we can observe gas upon a naked light, when it is mixed with black damp or with carbonic acid. I have seen it the length of my finger away waving about.

3863. You have known of firemen, as I understand you, that did not know the difference between the different sorts of gas?—Yes.

3864. And you think they would be better qualified to judge of gas if they had had a little more learning?—Yes.

3865. Do not you think that they could acquire that knowledge by practical acquaintance with a colliery?—Some of them would; but it is not all the miners who have worked in mines who understand gas. I dare say there are plenty of miners who have worked 20 years in the mine that do not understand the properties of gas.

3866. And you think that the firemen are occasionally selected without sufficient reference to their knowledge?—Yes, I believe they are.

3867. Mr. *Liddell.*] In reference to ventilating a mine upon your plan of splitting the current and superseding the use of doors, would there not be this danger: that if the workings were very extensive, you would at last get to a point where you had so subdivided your column that the quantity of air at your disposal would be wholly insufficient for the ventilation of the distant parts of the pit?—No, I do not think it would. It would depend upon the up-cast and the down-cast being sufficiently large to allow a current to pass down, so as to divide it to any part where you wanted it.

3868. In proportion as you extended your workings, you would have to increase the volume of air at the down-cast shaft?—Yes.

3869. Mr. *Woods.*] In this plan, which you have drawn, you have several splits, and at each split you have a regulator?—Yes.

3870. If the main air course down the shaft were divided into three splits, you would want three regulators?—Yes.

3871. Under those circumstances, I apprehend you will agree with me that it would be requisite to watch the regulators to see that one was not taking more than its share to the robbery of the other splits?—It would be according to the amount of friction.

3872. It would be requsite to watch them, to see that one did not get more than its share, would it not?—If I knew what was coming down the down-cast shaft, I could easily ascertain by the anemometer, whether each regulator was taking the right quantity.

3873. It would be requisite to watch it?—Yes.

3874. Even without doors, there would be a danger of one portion of the mine getting less than its share of ventilation and becoming explosive?—No; not if the regulators were made equal.

3875. But the regulator, I understand, is something like a cottage lattice window that slides?—Yes.

3876. You would fasten it to a particular place and lock it?—Yes.

3877. And according to that system, each portion of the mine would have to be watched by firemen with as much care as on the door system?—I will show the Committee on a plan, what took place in the present year on January 27th, which will answer the question very pointedly in reference to the question of doors, and doing without doors. There is a set of workings here, supplied by a course of air direct from the down-cast shaft (*describing the plan to the Committee*).

3878. *Chairman.*] You think, as I understand you, that the ventilation has, in one instance, been improved by the removal of doors?—Yes.

3879. Mr. *Woods.*] I suppose that the doors are to admit of coals going by the shortest route to the shaft, and yet to preserve the air along its proper course, are they not?—Where doors are used, the doors will, of course, permit the corves to come the nearest way to the shaft.

3880. That is their object, is it not?—Not only that, but to propel air further round the course.

3881. But with your experience of the working of mines, supposing that the air requires to travel all round the outside of an existing colliery, cannot you conceive a state of things in which, by the use of doors, the coals might go the shortest course to the pit; and, in fact, that is the object of doors, is it not, to permit the coals to go the shortest course to the pit?—Not altogether.

3882. What is the object of doors, then?—For both things; to propel the air and to permit the corves to come the shortest route.

3883. With regard to the ideal plan which you have exhibited to the Committee, have you described any faults, dykes, or steps upon it?—Not in that plan.

3884. But I suppose that in collieries there generally are faults, steps, and dykes, which cut up the colliery into sections?—Yes, I have seen them, but I do not think it ever tends to retard the ventilation.

3885. Then it is quite possible, I suppose, that the two shafts might be in one part of a colliery, and there might be half-a-dozen different sections or different levels in the same colliery?—Of course, there might be different routes.

3886. I do not mean different routes, but different levels and heights, upthrows and down throws in the mine, dividing it into sections?—Yes.

3887. Then each one of these would require special mode of ventilation, would it not?—I believe it might be constructed upon one system.

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3888. Each one would require a separate split to ventilate it, would it not?—That would be beneficial.

3889. If so, then probably the proper route for coals to the shaft might have, in several collieries, to be through doors?—I have seen at Messrs. Pope & Pearson's Colliery in West Yorkshire, the routes fixed without doors, and they have come the shortest way with the coal, and the air has gone the same way in.

3890. *Chairman.*] Have you anything to say about the inspection of mines?—We think that generally it is not satisfactory.

3891. How often in the year has the inspector come to your mine?—I cannot exactly say how often he has been within these last five or six years, but I believe he has not been more than four or five times within these last five or six years.

3892. Has he come without being sent for?—No, I believe not.

3893. Who is the inspector in your district?—Mr. Morton.

3894. Have there been many inquests from accidents since 1860?—There have been a few.

3895. Have the results given satisfaction?—Not generally.

3896. What have the verdicts generally been?—Generally accidental death.

3897. Have they always been that?—Yes.

3898. Has the inspector usually attended?—Yes, I believe he has attended every case within these last five or six years with the exception of one; I think there was one that he did not attend.

3899. Have you known of any actions for compensation arising out of these accidents?—Not one to my knowledge; there is one case upon which it is intended to bring forward actions, I believe, and that is at Garford Colliery, near Leeds.

3900. Did the jury in any cases express the opinion that the accident had arisen from carelessness?—Not that I am aware of.

3901. Are the men generally satisfied with the way in which the inquests are conducted?—No; the men wish that the jury should be composed one-half of operative miners.

3902. That is the general feeling among the miners, is it?—Yes, that is the general feeling.

3903. Have you anything to suggest as to the number of inspectors?—I should say that three or four would be sufficient.

3904. There are not enough you think now to do the work?—No.

3905. And you would like them to come occasionally without notice, I suppose?—Yes.

3906. Mr. *Liddell.*] You say that you do not think the inspection satisfactory?—Yes.

3907. And that you do not think that the number of inspectors is adequate to the amount of work that they have to do, and you also wish that they should be at liberty to inspect a mine at any time that they may think fit, so as to place a more efficient check upon the employers in regard to ventilation and other matters?—Yes.

3908. Do you think that there would be danger, if you placed the conduct of a mine entirely in the hands of inspectors, that it would shift the responsibility from the shoulders of the employer on to the shoulders of the inspectors?—I do not know whether it would or not, but I believe that if the inspectors were to visit the mines unawares, unknown to the employers, it would have a tendency to lessen the number of misfortunes, and it would be a benefit in that way.

3909. That is another matter, and we will leave that subject alone. I will take it as your opinion, that the inspectors ought to visit the mines unawares occasionally. But what I want to know is this; if you have a constant system of supervision on the part of the inspectors acting on behalf of the Government, is there not a danger that you will shift the responsibility of the management of the mines from the shoulders of the employers on to those of the inspectors?—No, I cannot see it. I should say myself, that if the coal owners were to be responsible, they would see that the officers were competent men.

3910. But supposing that the inspector suggested some change in the management of a mine, and that after the adoption of such change an accident occurred, would not the masters naturally say, "we were compelled to do this under the direction of the inspector, and we are not answerable for the consequences"?—If it was done by the direction of the inspector, of course the masters would say that.

3911. That is what I mean by their shifting the responsibility. You do not wish, do you, to relieve the colliery owner of any amount of responsibility which at present attaches to him?—I should not wish to inflict anything upon the colliery owner except what was just and right.

3912. Is not he the person who is the most interested in the prevention of accidents at present?—Yes.

3913. Then do you make it as a charge against the owners of those collieries with which you are acquainted, that they are deficient in the discharge of their responsibility?—I cannot speak to that. I think myself they ought to be efficient, but I cannot say whether they are deficient or not.

3914. You say that you want an increased amount of inspection?—Yes.

3915. Then I ask you whether you think that the amount of care taken at present is insufficient, and whether you wish the authority of the inspectors brought to bear more than it is at present upon the management of the mines, with a view to giving greater security to the workmen?—I believe, if I understand the question right, that there are some respectable collieries which do not need looking after. For instance, I would take Mr. Charlesworth's. I believe that Mr. Charlesworth spares no pains in seeing that his collieries are properly constructed, so that the misfortunes would be few. I believe that there are others who would be very careless, and in their mines, where the carelessness was the fault of the colliery owners, I would throw the responsibility upon them.

3916. Then you draw a distinction between different colliery owners. Are the colliery owners in those cases, where you say that carelessness exists in the management of the mine, for the most part small owners, or are they large and wealthy owners?—I cannot say; some would be small and some large owners, probably.

3917. Are there large collieries in the hands of wealthy owners in which you think the management is careless at the present time?—Yes, if I am informed rightly, there are.

3918. But you do not speak from your own knowledge?—No, I cannot speak from my own experience.

3919. Mr. *Greenall.*] You gave your opinion a short time ago upon the inquests which are held. Were those inquests, to which you have referred, held in consequence of accidents which occurred in the mines where you were working?—Partly; I spoke partly of the colliery that I worked at, and partly of neighbouring collieries.

3920. You said that the arrangements for those inquests were not satisfactory in the case of the inquests held in consequence of accidents where you were working?—Generally speaking that is so, though we had a misfortune which happened, I believe, on the 16th December 1865, where that was not the case. I was called to help release the person, but when I got there the person was underneath the stone or corve and got killed by it. I believe that at that time it was the men's own neglect, but I believe that there are cases where it has been through neglect of the opposite party.

3921. Mr. *Foster.*] You have spoken of the visits of inspectors; you are aware, are you not, that the inspectors have it in their power to visit mines, under the Act of 1860, at all reasonable times, by day or by night, without giving any notice whatsoever to the owners of the mines?—I am aware that the rule specifies that.

3922. Therefore, as far as legislation can provide for what you require, it has already done so?—Yes, but I do not think it is compulsory.

3923. Upon whom?—Upon the inspector; he can visit when he thinks proper, I believe, but it is not compulsory.

3924. Would you have the duties of the inspectors defined by Act of Parliament in every point?—I would have the inspectors to visit mines once in every period of so long a time.

3925. To whom are the inspectors responsible?—They should be responsible to Government, I suppose.

3926. Then is it not a question for the Secretary of State, on the part of the Government, to see that the inspectors perform their duties and give their opinions satisfactorily?—Yes, it should be; I do not know as to how the matter really stands, but in my opinion it should be so.

3927. *Chairman.*] I believe the special rules that you have in West Yorkshire are the same as the special rules in South Yorkshire, are they not?—They are, I believe.

3928. Is there any one of those special rules as to which you have any observation to make. Look, for instance, at the third rule: "The agent and the underground viewer shall see that an ample stock of good timber, props, bricks, lime, rope, brattices, air-pipes, and other requisite materials, is always on the premises." Have you anything to suggest as to the wording of that rule; do you wish the rule in itself to be different?—Yes. "The underground viewer shall see that an ample stock of good timber," and so on, it says; but it is not compulsory that they should see it into the mine. For instance, in the mine where I work we have generally a stock of timber on the pit hill, but when we want it in the mine we cannot get it. I would make it compulsory that the men working in the mines should be supplied with timber when necessary.

3929. Sir *Philip Egerton.*] At the moment when it was needed?—Yes.

3930. *Chairman.*] You think that the words, "on the premises" are not sufficiently precise?—No, they are not.

3931. And the result of that provision is, that there is not always a sufficient supply of timber in the right place?—Yes.

3932. Who would you say should put up the brattices?—I would rather put up my own, because I know best where I need them.

3933. Is it the practice where you work that the miner himself should put up the brattice?—Yes.

3934. In some cases the fireman puts up the brattice, does he not?—Yes; where he sees any neglect of the miner.

3935. It is the duty of the fireman to see that the brattices are properly put up?—Yes.

3936. But in some cases the miner does it himself?—I have known him do it himself.

3937. Mr. *Liddell.*] You have just said, as I understand you, that in all cases you would like to be the judge, in any place where you are working, of the necessity of a brattice, and that you would like to put it up yourself?—If I was working in a place where it was likely to be dangerous, and where it needed any brattice, it would be a loss of time for me if I was to wait till the fireman came to put it up; I could put it up in a few minutes, and then my work would be safe.

3938. Provided the materials were close at hand?—Yes.

3939. Are those materials always close at hand?—Not always; sometimes we are kept a day before we can get them, and sometimes we threaten leaving work.

3940. Supposing that the place were a mile from the pit's mouth, putting up the brattice would be attended with a considerable loss of time?—Yes.

3941. Would not that be equal to the loss of time in summoning the fireman to the place?—If in any place I saw that it would be dangerous to work without any more brattice I should leave my work and go out.

3942. That brings me to this point: as a general question, if you have any complaint to make, either of negligence on the part of the fireman, or any complaint against the general management of the mine, your remedy is to complain to the employer in the first instance, or the head viewer?—If the deputy (that is the person above the fireman) was to come I should acquaint him that I wanted so much brattice, and if I could not get it, and if the place was dangerous to work in, I should leave my work.

3943. Do you know any cases in which those circumstances have occurred, that is to say, in which a workman has left his work because he did not think the place safe?—I cannot speak as to that exactly; I have known, when it has been so far safe that we could work, but yet it has not been exactly clear from gas; we have been perhaps 10, or 12, or 16, or 18 feet from the face.

3944. Your remedy, in the first instance, is a complaint to the head viewer?—Yes.

3945. Do you believe that that complaint would not be, in 99 times out of 100, attended to at once?—Not always.

3946. Supposing that the evil complained of is not remedied by the authority of the head viewer, it is open to you to complain to the inspector, is it not?—According to the Government law, I believe, we have the power to complain, but a person hardly durst do that.

3947. You say that you dare not complain to the inspector. Why?—Not always; because we are afraid of losing our employment.

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3948. Do you know any cases in which a collier has complained to the inspector and been discharged?—No, not personally; not what I may call ordinary colliers. I do not know of any being discharged, though I do know of complaints being made to the inspector where the steward has said that if he knew who had complained and made the charge to the inspector, that man should have no more work at the pit.

3949. Have you any objection to name a particular instance in which that has occurred?—I think it was in July last.

3950. Was it in the colliery in which you are engaged?—No; I wrote for the letter which was sent in reply to the one which was sent to the inspector, but, unfortunately, I have not got the letter. I believe it can be forwarded if it is requisite.

3951. Mr. *Woods.*] As to this question of setting the brattices, and drawing and cutting the timber, is it not entirely a question of agreement between the master and the men as to who draws the timber to the place and sets the props, and who puts up the brattice. Is it not entirely a question of agreement whether the collier should do it, or whether there should be a set of men provided to do it?—Not that I am aware of.

3952. Is it not the fact that in some collieries it is understood that the colliers are to do it?—Yes, but I am not aware of an agreement.

3953. Is it not the custom at some collieries that the collier does this work, and at other collieries that the by-men do it?—Yes, it is the custom, but not an agreement.

3954. I think I understood you to say that in the case of setting a brattice, in your opinion it was safer if the collier did it?—I did not say "safer." I said that if I was working in a place where I needed a brattice, if I had a brattice near the place, I would rather set it myself than wait till the fireman came to set it.

3955. Is it not also entirely dependent on the custom of the colliery whether the collier comes up to get the timber and take it down himself, or whether it is taken down for him?—The custom at the colliery where I work is this, that the timber is generally on a heap at the top of the bank. When we get our work done at night, we fetch the timber up and mark on it the number which we work by, and we have it there ready for sending down at once or the next morning, and I have known cases where we had got timber up ready for going down into the mine, and we have not got any for a fortnight successively.

3956. You mean that none has been sent down for you?—It has been sent down, and gone to other places.

3957. Other men have got it, and not you?—Yes.

3958. Is it a large set of works that you work at, or a small one?—We are just finishing that seam, so to speak.

3959. Is it a small set of works, then?—There are 100 men employed.

3960. It is the custom, as I understand you, in your colliery for the men to come up to get their timber; there are not men provided to do it?—No.

3961. And the timber is stacked on the pit hill?—Yes.

3962. If a set of men were provided at your colliery to saw the timber, and take it down to you, and deliver it to you in your own places, you would have more time to get coal?—We should not materially have more time to get coal, but we should have timber there to set when requisite.

3963. But you would have more time to get coal also, would you not?—I do not know that it would make any difference in that way.

3964. The owner of the colliery would have to pay a man for doing that work which you now do?—Yes.

3965. And it would render your labour that much lighter in the week?—It would make no difference to our work but this: that when we found a place where it was necessary to set a prop we should set it ourselves, at once.

3966. But the same thing would occur, I apprehend, if you took good care to take the props down with you after you had sawn them?—No, I have known cases where we have taken timber there, and, for 12 days successively, other people have got it.

3967. Why do not you take the timber, each man for himself, when you have sawn it?—We cannot take it down; it is not allowed by the rule. Supposing that there are five or six props 4½ feet long, and perhaps six or eight inches in diameter, it would be very inconvenient to take them down.

3968. It is the agreement, at your colliery, that you do saw your own props, is it not?—No.

3969. It is the custom, then?—It is not the custom for us to saw any props at all; the props are sawn and brought to the pit's bank for us, and laid on a heap, so that when we need props we can pack them up to send them down into the mine the next morning; but it is not always that we can get supplied.

3970. Do you know any colliery where the props are taken down the mine for the men, and delivered to them?—Yes.

3971. Then that is another custom, at that colliery, differing from the custom at your colliery?—Yes, I believe that they do that at Messrs. Pope & Pearson's colliery, at Whitwood.

3972. *Chairman.*] Will you look to Rule No. 4 of the special rules as to the providing of refuges. Is that sufficiently attended to in your experience?—According to the rule, it is.

3973. Then is not the rule sufficient, in your opinion?—We think that the refuges should be every 10 yards on one side or the other.

3974. Alternately?—Yes.

3975. You think that 20 yards is too great a distance, and that it ought to be 10 yards?—Yes.

3976. But the rule, such as it is, is complied with?—Yes.

3977. Now, will you look to Rule 17; it is there said, that where there are doors, there must be door-keepers appointed where needful; have you any observation to make upon that?—No.

3978. In the case of the mines with which you are acquainted, there are not door-keepers, because they are all swing doors?—I do not know of any door-keepers in the mines that I am acquainted with.

3979. The last witness objected to the words "where needful;" he thought that it ought to be compulsory, wherever there were doors, to have a door-keeper?—I do not know that it is needful in the colliery where I work, but it might be in other collieries.

3980. You mean that swing doors are safe in your colliery?—Yes; I believe that the swing doors in our colliery shut themselves properly;

if

if there is any deficiency at any time, a notice is given, and it is soon remedied.

3981. Mr. *Woods.*] I suppose that if the roof is a rotten roof, it is difficult to make the refuges very often. Supposing, for instance, that it is entirely, what they call in some parts of England, coupled with wood the whole way?—It would be better in those refuge places if there was an entire road made on purpose for the men to travel up and down, so that they should not travel at all in the engine planes.

3982. In the case of refuges, where the roof requires to be covered with timber the entire way, that does add to the difficulty of making the refuges, does it not?—I have not seen it so.

3983. But supposing that there are such places, it would add to the difficulty, would it not, of making the refuges?—No, I cannot see that it would, because a pair of couplings would make it secure.

3984. It would add to the difficulty, surely?—It would not be difficult at all.

3985. But it would add to the expense of making the refuges?—Of course, it would.

3986. *Chairman.*] Is there anything else that you would like to state to the Committee?—We would apply the ventilation to all accessible places.

3987. You would not have them walled up?—No, I would not.

3988. In speaking of "accessible places," you are referring to places that are put aside for a time?—Yes.

3989. With the intention of going into them again?—Yes; such places as those, I would not have walled up; I would have them properly ventilated, because if they are walled up, there is a tendency to accumulate gas, and it might become pressed, and be forced out in some way.

3990. Even a working entirely given up, you would have ventilated, would you?—I would not say that that should be done in the case of old workings that are entirely passed away, and that are never coming into contact with us any more; but there are at certain places headings, which are walled up at times, and which have not a regular current of air passing through them; I would have all such places as those properly ventilated.

3991. But where a working had been entirely given up, you would not object to its being walled up?—Not if there was never any occasion to go into it, because I should not consider that an accessible place.

3992. Have you ever known the gas driven out from these places that have been walled up, by falls of the roof inside?—Yes; twice in the place that I am working at, we have had to leave working, and go out on such occasions.

3993. Because the walls had been blown down?—They had not been walled up places, but what we call goafs or breaks, where the coal is got. There have been times when the gas has accumulated, and the roof falls, and it forces the gas out, and on to the men at once. Those places I would say should be made so that the gas could not accumulate.

3994. Has not the mouth of those places been stopped up?—No.

3995. Nothing has been put across it at all?—No, nothing has been put across, to my knowledge.

3996. We had one witness who said that though these places might be walled up, the fall of the roof inside might drive the gas inside against the wall and blow it out; you have never known that case, you say?—No.

3997. Have you anything else that you would wish to say?—There is the question of the safety-lamps. If the first general rule was complied with, there would be no need of the safety-lamps.

3998. Mr. *Woods.*] Why would there be no need of safety-lamps?—Because there would be no gas there to explode if the gas was rendered harmless.

3999. Supposing that the goaf contained gas, and that it came out suddenly, as you have described, by the fall of a roof, would not lamps be necessary in such a case?—They might keep it clear.

4000. Supposing that a goaf of many acres in extent was partially ventilated, and that the roof fell, and some gas came out, would not there be a necessity for lamps then?—Yes; if gas is there, there will be a necessity for the lamps, but if there is no gas there, there will be no necessity for them.

4001. Where the up-cast pit and down-cast pit are near together, and they are on the deep side of the colliery, and the goaf has been worked on the cross, is it possible to ventilate the goaf in all cases?—I do not think it is possible to keep it clear in all cases; you might to a certain extent.

4002. Do they not sometimes tap disused workings that contain gas?—I have known them do it.

4003. It would not be safe to be working without lamps then, would it?—I know a place at the colliery at which I work, where they tapped it, and let out an amount of gas, but the place was filled up by rubbish or rock which had fallen.

4004. When they tap a place full of gas which has been made off, would it be safe to be without lamps while that was being done?—No; but if the gas could be made harmless it would be safe.

4005. *Chairman.*] Is there any other point that you would like to refer to?—We also wish that covers overhead, in pulling men up and down, the shaft should not be subject to the disposition of the inspector; we want it to be compulsory.

4006. That is provided by the 9th General Rule, is it not; you would leave out the words "where required"?—Yes.

4007. You would make the 9th Rule obligatory?—Yes.

4008. Have you any other alteration in any of the rules to suggest?—The 12th General Rule is "a proper indicator to show the position of the load in the pit or shaft, and also an adequate break shall be attached to every machine worked by steam or water power used for lowering or raising persons" We say that this indicator should be one that would be patent to the engine tenter.

4009. Is there any other alteration which you wish to suggest?—The 14th General Rule says: "The fly-wheel of every engine shall be securely fenced;" I think that not only the fly-wheel but the machine entirely should be fenced off.

4010. Have you known accidents for want of that being done?—Yes.

4011. You would wish the machinery generally to be fenced off?—Yes, it was not the rule to fence it off, but I have known accidents where it has not been so.

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4012. Mr. *Woods.*] Do you mean in the case of a person who has had any business in the engine house?—I have known a case where the engine tenter himself was killed by it.

4013. Can you protect the engine tenter from his own engine; is it not one of the risks incident to his position?—There are cases where an engine man might be caught by something.

4014. Is not the risk which the engineer runs in attending to his own engine appurtenant to his employment?—Yes.

4015. Can you fence the engine as against the engine tenter?—Not wholly.

4016. What business have any other people in the engine house?—They have no business.

4017. No collier has any right there?—No; I do not know that any collier goes into the engine house where I work.

4018. I suppose that a piece of machinery may be so fenced or covered up as that it may be impossible to see any flaws or damages arising to it; is that so?—Possibly it might be so, I cannot speak to that.

4019. General *Dunne.*] What is your object in wishing to have this machinery fenced?—To prevent the engine man, or any other person who might have occasion to go in, from having any misfortune.

4020. Mr. *Woods.*] Is it within your knowledge that the Secretary of State of the Home Department, the late Prime Minister, issued orders for fencing the machinery under the Factory Act, and afterwards withdrew them?—No, I am not aware of that.

4021. General *Dunne.*] Do not you think that he was wrong if he did withdraw them?—Yes.

4022. Mr. *Kinnaird.*] To your knowledge are not, under the Factory Act, all the dangerous parts of machinery boxed off?—I have no acquaintance with the factories.

4023. Mr. *Greenall.*] The fly-wheel of the engine, as you speak of it now, is only dangerous to the engineer, is it not?—There are no people who have any right, generally speaking, in an engine house except the authorities.

4024. Have you ever known of an engineer being hurt by the fly-wheel?—Yes.

4025. Where?—At Whitwood Colliery.

4026. *Chairman.*] Have you anything else which you wish to state?—There is the question of weighing.

4027. In West Yorkshire, is it weighing or measuring that is adopted?—In some parts we get by weight and in some by measure.

4028. What is your opinion as to the relative advantages of the two systems?—The opinion of the men generally is that the coal should be got by weight.

Mr. Samuel Cartlidge, called in; and Examined.

Mr. S. Cartlidge.

4029. *Chairman.*] What are you?—I am a Working Collier.

4030. From what district?—From North Derbyshire.

4031. Is that the Clay Cross Colliery district?—It is in the neighbourhood of the Clay Cross Colliery.

4032. How long have you been there?—I have been about five months at that place.

4033. Where were you before?—At West Staveley.

4034. Where is that?—That is in North Derbyshire, too.

4035. Have you always worked in North Derbyshire?—No.

4036. How long have you worked in North Derbyshire?—About 12 months.

4037. Where did you work before?—I worked in Staffordshire before.

4038. Have you worked anywhere else?—Yes, I have worked a little in Lancashire.

4039. And you are come now to speak about North Derbyshire, are you not?—Yes.

4040. How long have you been a miner altogether?—About 26 years.

4041. At what age did you begin?—I was about eight years old.

4042. Mr. *Kinnaird.*] Where were you born?—I was born in the Staffordshire Potteries.

4043. *Chairman.*] Is it a large colliery where you are employed now?—It is not a very large one; it is a middling sized one.

4044. How many men are employed there?—On the top and down below there are about 200 men and boys.

4045. How many of these are men?—I should suppose about 140.

4046. And 60 are boys?—Yes, about that number.

4047. Up to what age do you call them boys;—They will average from 10 to 16 years of age.

4048. Are there many boys under 12?—Yes, I should say there were; possibly there may be 20 at that colliery.

4049. Is it the practice in that district to employ boys under 12?—Yes.

4050. It is a general practice, is it?—Yes, it is a general practice.

4051. Do they get a certificate; do they attend to the requisitions of the Act as to certificates?—No, they do not; I do not hear of anything of the kind.

4052. Are many of these boys under 12 able to read and write?—Some; there are some instances where they can do it, and some where they cannot.

4053. Which is the most common class?—Those who cannot.

4054. Is their schooling attended to?—There is a school, and there is a schoolmaster, but the boys are so much occupied with their daily work, that they have no time for school with the exception of Sundays.

4055. They do not attend the day schools, but Sunday schools?—Yes.

4056. How many hours do they work?—They go down in the pit about half-past five in the morning, and are down till six or half-past six at night.

4057. What are the hours of the men?—The day men average about the same; I mean the men that work by the day for the company.

4058. What work do the boys do between the ages of 10 and 12?—Some couple the waggons together, and others drive ponies.

4059. Are there any doors in that mine?—A few.

4060. Are the boys set to watch the doors?—No, there is no attendance on the doors.

4061. Their chief business is to couple the waggons and drive the ponies, you say?—Yes.

4062. Is

4062. Is this a thin mine or a thick mine?—It is about five feet six inches.

4063. So that ponies can work in most of the cuttings?—Yes, they do in all in that pit.

4064. Are there any women there?—No.

4065. How long has that been so?—I cannot tell.

4066. You have never known women there?—No.

4067. Is that because the masters will not employ them, or is it that the women do not offer?—It is not a custom; they never ask for the employment, and so, of course, they never get the employment.

4068. What alteration have you to suggest in the law with reference to the boys?—It is the general feeling of the men that the boys should only work about eight hours a day.

4069. Up to what age would you apply that rule?—From 10 to 14 years of age.

4070. Boys under 14 should not work more than eight hours a day, you think?—No.

4071. What would you say with regard to their schooling?—They should go to school, I think, for so many hours a day (about four or five days a week), that is to say, in the evening part of the day.

4072. Up to the age of 14, do you mean?—Yes, up to the age of 14.

4073. After the age of 14, what would you say with reference to their schooling?—It should be optional.

4074. You would not interfere by law with the education of the boys after the age of 14?—No, they get up to be young men then, and take the thing into their own hands.

4075. Mr. *Clive.*] You say that they do not attend to the Act at all as to the education of boys between the ages of 10 and 12?—No, they have no time to be educated.

4076. But they are bound to have a certificate by the Act?—They have no certificate.

4077. How do you know that?—I know it by seeing the boys set on to work, and by seeing that the certificates are neither asked for nor given.

4078. Do you mean that the manager of the colliery never asks for a certificate?—No.

4079. Are you certain of that?—Yes.

4080. Who is the manager?—The head manager is Mr. Ward; he is proprietor and all.

4081. He is there always, is he?—He is not there all the time; Mr. Shaw is the head viewer.

4082. He never asks any questions whether the boys can read or write; is that what you mean?—I cannot say whether he asks those questions, but there is no certificate given or required.

4083. Do the parents of the boys like their coming in at that early age?—I suppose it is their selfishness which makes them wish to get all they can from the boys in the way of wages, that is the cause of it; but still at the same time the general feeling of the parents is that the boys should get some more education than they do get.

4084. You say that you would not have the boys work more than eight hours; how long would you have the men work?—I suppose that is optional on their part.

4085. How long would you think the men ought to work?—About eight hours.

4086. Mr. *Liddell.*] These boys you say work 13 hours a day on an average?—Yes.

4087. The boys that work 13 hours a day are attending, are they not, upon the men who are what you call day workmen?—Yes.

4088. That is to say, they are not men working by the piece?—No, they are not men working by the piece.

4089. So that it does not follow that the boys are working continuously all those 13 hours?—Yes, those boys are driving the ponies, and the ponies are leading the coals from the men who are engaged in loading, and those men go down at half-past five; they are at work at six in the morning, and do not leave off work till six at night. Those men will be, perhaps, half a mile or more away from the mouth of the pit when they leave off work at six o'clock.

4090. What allowance have they for meals?—They have half an hour at breakfast time (the pit stops turning for that time), and 40 minutes at dinner time; but the boys that lead the coals to the bottom of the engine plane with the ponies, have to keep on working so long as there are waggons to bring, and sometimes it occupies them all their time, and they have to eat as they go.

4091. Have you any boys of your own?—Not any that are old enough to work.

4092. What wages do the day workers make?—Four shillings a day is the average price that the company pays them.

4093. And the boys make how much?—Their wages will run from about 10 *d.* to 1 *s.* 10 *d.* a day.

4094. How far is this colliery from Clay Cross?—It is about two miles, or perhaps a little over two miles; it is called Wingerworth Colliery.

4095. Do you know whether the wages paid in this colliery are the same as the wages paid at Clay Cross?—Yes, for the company's day men; it is 4 *s.* a day, I believe, in both cases.

4096. Do they work by the day or the piece at Clay Cross?—They work some by the day and some by the piece; the stall men work by the ton, and the loaders load by the day.

4097. Mr. *Woods.*] Does the collier work by the day?—No, the collier who gets the coal works by the ton.

4098. Mr. *Liddell.*] Who engages the boys?—The managers engage the boys and they pay them; the stall man has nothing at all to do with that.

4099. Mr. *Foster.*] How many days a week do you usually work?—We usually work about six days, that is to say, the pit will turn six days without an accident, or something of that kind. There are instances where it would only be five days; but then it is when they are either short of coals down below, or short of trucks on the top.

4100. Does the pit ever stand on Mondays for want of coal?—Sometimes they will turn but half-a-day, or sometimes three-quarters; and if they are short of coals down below, when all the men are not in, they cannot always keep the pit going, because the stuff that those men get who are in, is taken away long before night.

4101. At what time has the stall man generally done his day's work?—The stall man is allowed to go in in the morning from four to five o'clock, that is the time that is arranged by the viewer for him to go in to see that his stall is all right and ready for turning coals out, and then the men and boys are all in and ready for work at six o'clock.

4102. At what time would he generally finish his day's work?—They vary in their hours of

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work according to their notions and according to the places that they work in. Some will have done by 12 o'clock and some by two, and some by four; that is near 12 hours for some.

4103. Then the day men and boys are often down till about six o'clock you say, do you not?—They continue working in the pit till about six o'clock, then they leave off work, and by the time they get out on the top and get home it is about seven o'clock.

4104. Mr. *Woods.*] Does that mean every day in the week?—Every day in the week, with the exception of Saturday. They generally leave off at what they call three-quarters on Saturday, on account of the pay.

4105. General *Dunne.*] You say, then, that they work every day?—All the six days.

4106. They do not leave a day idle?—No.

4107. You said that the doors were not attended to by boys; how are they managed?—The door is so hung as that, when anything goes through it, the door will swing and shut of itself; and when the pony is going through it he just pushes it open with his head, and coming the other way the boy goes forward and opens it.

4108. Sir *Philip Egerton.*] What is the name of the inspector of your district?—Mr. Evans, I believe.

4109. How often has he inspected the mine since you have been employed in it?—I have never heard of his being there since I have been there, but I believe he was there a short time before.

4110. Mr. *Kinnaird.*] You think that the education certificates are very much evaded, as I understand you?—They are not asked for and are not given.

4111. Can you give any instances of their being rigorously enforced, that you know of?—No, I cannot.

4112. Have you seen any bad effects from their being evaded?—Only that the boys go into the pit so young, and stay in the long hours that they do stay in and get no education; that is the evil.

4113. So that the only instruction they can get is in the Sunday schools in many cases?—Yes; and, as a matter of course, on Sundays the boys want a little play or rest. Some of the boys work very hard, and it is as if more work were put upon them than they can properly do, and they want to lie about and rest all day on Sunday at home; they do not feel inclined to learn, or anything of that kind.

4114. You think that it is physically impossible that they should be able to do so?—Yes.

4115. After such exertion they have not mind or energy or strength to apply to any education?—They have not, I believe.

4116. And you are strongly in favour of having those regulations of the Act put in force?—Yes, and it is the general feeling of the men in that district.

4117. Mr. *Woods.*] Am I right in supposing that a set of day men and boys are attached to a particular set of colliers; that is to say, that although not employed by them they are attached to them to work after them?—They have to work in the places they are employed in, but it is the master who employs them.

4118. But are the boys and day men dependent for the quantity of work that they do upon the quantity of work that the colliers do?—Yes, to a certain extent.

4119. Then, if the colliers worked irregular hours, I suppose the day men and boys must make irregular hours, if the system is that there are a certain number of boys and men attached to a set number of colliers?—That is not the system.

4120. How do they divide the work?—It is divided in this way. On certain occasions there are so many ponies and pony drivers in the pit, and wherever there is any coal to be turned out, if there is some in one place and not in another, the boys are sent there and they must bring it out. They are not principally attached to those men that they are working with one day; they are not compelled to go in the same place again the next day.

4121. As the colliers work by piece work, do they always make the same length of work each day in the week?—No, not the stall men that work by the ton.

4122. When they are irregular in their work the day men and boys are also irregular, are they not?—Sometimes they will have larger stocks of coal ready; sometimes they will be short of men in their stalls (it is got on what they call the long wall system), and by that means they get a considerable amount of stock beforehand, and on those days, when they have got so much stock beforehand, the stall men can leave off working so much sooner and work short hours, but still the day men and boys have to stay in.

4123. *Chairman.*] By "stock" you mean coal cut, do not you?—Yes.

4124. Mr. *Woods.*] When you were asked about the number of days in the week that the men worked, I thought I understood you to answer that the engine and the pit worked every day; you did not mean that each collier worked every day in the week, did you?—No, not each one. There are instances where a man will stay away a day sometimes because he is sick and sometimes because he feels inclined to do so.

4125. Is there any system of a play Monday in that district?—No; no system of that kind.

4126. *Chairman.*] How much can a good stall man earn in 10 hours' work?—It will vary according to the stall that he is in; I mean according to the part of the pit that he is in.

4127. Take the average?—On the average, he will earn about 4*s.* or 4*s.* 6*d.* a day.

4128. A very good man will earn more I suppose?—He would have to work longer hours to earn more.

4129. Do they earn more now than they used to do 10 years ago?—Yes, I believe so.

4130. Are they paid at a higher rate, or do they work longer?—I suppose they are paid at a higher rate; they do not work any longer.

4131. Do you remember what difference there would be between this time and 10 years ago?—I have heard it reported that 10 years ago they worked much later; in fact, I heard one man say on Saturday night last (and that man is what they call a check weighman now for the workmen) that he has had to work when he was a boy (he has just sprung up into a man now) till nine o'clock at night before he could get out.

4132. From what hour in the morning?—From six o'clock in the morning.

4133. Then they used to work longer 10 years ago than they do now?—Yes.

4134. Was that every day in the week?—I cannot say that it was.

4135. Sir

4135. Sir *Philip Egerton.*] Has that man to whom you refer been examined before this Committee?—No; I suppose that man is at work to-day on the Clay Cross Colliery; his name is Jesse Bamford.

4136. *Chairman.*] Where was it that he worked so late?—He did not say whether it was on that colliery, but it was in Derbyshire; in the neighbourhood.

4137. What are the stall men paid per ton?—They are paid from 2*s.* 3*d.* up to 3*s.* per ton, according to the nature of the stall they work in.

4138. Ten years ago, what would they be paid per ton?—I cannot answer that question.

4139. Are you satisfied with the ventilation in the district that you know?—Not perfectly satisfied; it could be mended to a certain extent; it could be better carried out than it is.

4140. What defects have you to point out in the ventilation in your district?—Simply that it is not properly carried out round the workings.

4141. Is it deficient from want of doors, or from want of brattices?—The deficiency is simply in the long-wall system. The air ways have to be carried through the goaf, and it is a matter of course that they are crushed down till they are very small places, by the weight of the goaf, that is to say, by the natural pressure of it when the coal is taken away. In some instances, the material that lies under the coal will swell up, and the goaf will press down, and the places naturally become small places, and do not allow a sufficient quantity of air to go round.

4142. The ground swells up, and the roof presses in, and the air ways get very confined, is that it?—Yes.

4143. So that there is not a sufficient current of air to come round by the workings?—There is not.

4144. What remedy do you suggest for that?—That they should be made larger.

4145. The difficulty then is, that the air ways are not large enough?—Yes; and they are not properly attended to and kept in order, because of the expense; the men that are under viewers only do what the head viewers will allow them to do; they dare not run into any further expense than that, because the head viewers simply state that the colliery would not pay if they did.

4146. Then out of regard to economy, the air ways are not made sufficiently large, or kept sufficiently free?—That is so.

4147. You have not the brattice system, have you?—No.

4148. You have the air current brought close behind you?—Yes, it is brought close to the working face, but it is not sufficient.

4149. Mr. *Clive.*] Do you mean that the air courses are not sufficient now, or that they were not sufficient when they were constructed, or that they have become small?—Yes, they have become smaller with the natural weight of the place.

4150. Will the time come when they will be closed entirely, do you suppose?—Yes, I think so.

4151. Has that ever taken place to your knowledge?—Not while I have been there.

4152. You think that it is going on to that result?—Yes, if there are not more hands put into it.

4153. Has any representation been made to the owners of the colliery about that?—They will not allow you to interfere with their affairs.

4154. Have you ever complained of it?—No, I do not know that we have, but they will not allow you to complain of these things; they will simply tell you that it is they that are paid for managing the work, and not you.

4155. The viewers, you mean, tell you that?—Yes; and as a matter of course you have nothing to say against it.

4156. Have you made that representation to them?—Yes.

4157, And that was the answer you got, that it is not your business?—Yes.

4158. Is there anything to prevent you from leaving that colliery and going elsewhere?—Not that I am aware of. The owners in general do not listen to the complaints of the working men, it is the viewers that you have got to make your complaints to.

4159. Mr. *Liddell.*] You have been five months, I think, in your present employment?—Yes, about five months.

4160. And you had previously been a few more months at West Staveley?—Yes.

4161. How many months?—About seven months; it is about 12 months that I have been in Derbyshire.

4162. So that you have not had a very extensive experience of the district of which you are now speaking?—Not a very extensive one, but I have heard a good deal from report.

4163. You are speaking then more from report than from your own knowledge?—As to this colliery where I work, I speak of that from my own knowledge.

4164. You think that you are representing the views of the workmen in your district?—Yes.

4165. You have not, in the course of those 12 months that you have been in Derbyshire, had very ample opportunity of becoming acquainted with the whole district, I presume?—Not thoroughly acquainted with the whole district, but still I have learnt a considerable amount of the feelings of the people, and of the rules and regulations of the colliery, and so on.

4166. Mr. *Foster.*] Where are your wages paid?—At the office. It is near Clay Cross Railway Station.

4167. Do you ever take the opportunity at the office of stating a complaint to the parties there representing the proprietor that your complaints to the viewer have not been attended to?—As a general thing it is the clerk that pays us our money.

4168. But does not the attendance of the men on the pay-day at the office afford favourable opportunity of mentioning to the clerk or other parties there any complaints made during the week which have not had attention?—I cannot speak as to that.

4169. Is not the pay-day generally a day when things of that kind are mentioned?—If the men wish to complain about the way in which their places are laid out, and the way in which the work is carried on, they do not, as a custom, think of making these complaints to the proprietor; they will simply make them to the deputy of the pit, or to the viewer, and if they do not listen to these things and remedy them they appeal no further.

4170. Have not the men an opportunity for doing so if they choose to avail themselves of it?—I suppose they have; but at the same time, if a man that is working for his wages begins to appeal to the proprietor about those things, and

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to state how the thing is going on, the viewer comes to know of it, because the proprietor tells him of it, and the next thing is that there is something the matter with that man's work, and he must go his way.

4171. Have you ever had any explosions in the mine where you are now working since you have been there?—Yes.

4172. Have you had any accidents?—No.

4173. Do you consider the management of the mine generally satisfactory?—Generally it is, with the exception of the air ways that I have been speaking of.

4174. General *Dunne.*] The reason the miners do not complain is that some pretence is found afterwards for removing them, if they do complain; is that so?—Yes.

4175. Mr. *Kinnaird.*] And you have known some cases in which men have been removed for making complaints and suggesting what they think necessary improvements; do you mean that?—Yes.

4176. *Chairman.*] Have you anything to say in reference to the propping?—The proprietors or the managers, I cannot say which it is, but any how it is the company, make it compulsory on the man that is employed in the stall, and that works the stall by the ton, to pay for all the timber that is used in the stall, and all that is lost.

4177. Have you any complaint to make in respect of the timber being not within reach; how far have you to go for your props?—If you order the timber they will send it to you, and deliver it right into your stalls.

4178. Only they make you pay for it?—They make you pay 8*s.* 6*d.* a dozen for it.

4179. Do you suppose that the proprietors make any profit by that?—Yes.

4180. Of what length are the props?—About five feet long.

4181. What sort of wood are they commonly?—Some are Scotch wood, and some are larch.

4182. Of what thickness are they?—It is what is termed about four-and-a-half or five inch timber.

4183. The masters sell that at 8*s.* 6*d.* a dozen, you say?—Yes.

4184. And you conceive that they make a profit by it?—As a matter of course they must if the man pays them for it instead of their finding it for themselves.

4185. But they include in that price of 8*s.* 6*d.* the expense of bringing it to the working face, do not they, and bringing it right up to the stalls?—It is their duty, I suppose, to do so.

4186. The proprietors charge, as I understand, 8*s.* 6*d* a dozen for these props; you do not mean by that that the workmen could get the props cheaper from anybody else, do you?—No, that is the point.

4187. Only you think that the workmen ought to have them for nothing?—I mean to say that the owner of the works ought to find them for the supporting of his works.

4188. Have you got a copy of your special rules?—No, I did not bring one.

4189. Mr. *Clive.*] You think, in fact, that the master ought to find the workmen in props?—Yes.

4190. Would not that be, in fact, adding so much to your wages?—No; perhaps it would in one light, but it is not altogether for what it would be adding to our wages that I think it wrong; it is the risk to our lives. There are some stalls that men work into where they make very little money, and because they cannot make a proper day's wages in those cases they try to do without this timber because they have to buy it; and so they run the risk of their own lives, and the life of the party who works in the place along with them.

4191. You think that the Legislature ought to interfere to prevent their running that risk, do you?—Yes, I think it ought to be made compulsory on the owners to find all materials of that kind.

4192. Mr. *Liddell.*] You say that there are some stalls where a man cannot make what you call a proper day's wages?—Yes.

4193. Is that owing to the hardness of the coal, or to what is it owing?—In some places it is owing to the hardness of getting the coal, and in other places it is the roughness of the top, they cannot properly keep it up. It takes them so much more timber, and so much more packing to do to keep up the top, that it takes them in consequence so much more time to get the coals.

4194. But the nature of these pits is perfectly well known beforehand, and these matters are considered in your original arrangement with the master, are they not?—They are to some extent, but at the same time we fancy that it is not altogether right that we should have to pay for the timber, because even when we have no timber to pay for we can make but a common day's wage, the same as at places where they do not pay for it; and if we have to buy it, it is a matter of course that it takes a part off the wages.

4195. In the case of the Clay Cross Colliery; is the timber supplied there to the men, or do they bring it?—It is supplied to them.

4196. Is your colliery an exceptional case in regard to this timber?—It is an exception to all the collieries that ever I have been at or heard of.

4197. Then it is not a general complaint, but a particular complaint connected with this one colliery?—Yes, with that one company.

4198. Mr. *Foster.*] Are the prices arranged for the different stalls according to the facility, or the contrary, with which the coal is got; is the price raised when, from any particular cause in a stall, the difficulties of getting the coal are increased?—In some instances it is; but sometimes if a man has got a very bad stall and cannot make a day's wage into it, they will not make an amendment for him; at least not so long as the man will stop there and keep working into it.

4199. But is not this a question of detail between the employer and the employed, which the Legislature could not possibly touch?—I should think so as far as regards the different prices of the coal in the pit.

4200. Is not the evidence you are giving now evidence bearing most directly on that point?—It is simply bearing on the wood, and on the money being taken off the man's wages for the wood; because even when the man has no wood to pay for he can make but a bare day's wage, and when the price of the wood is taken off him, when, say a dozen of wood taken off a man's wages in one week, it reduces that man's week to about half a week's wages.

4201. And this you have stated applies solely to the company under which you work?—Yes.

4202. Not to the district generally?—Not to the district generally.

4203. General *Dunne.*] Are not the owners obliged

obliged by the Act to prop in the collieries?—Yes, I fancy so.

4204. Then it is a breach of the law when they make the colliers do it?—Yes.

4205. And, in fact, in your colliery the men receive less wages than they do in any other in the district?—Yes, when this timber is taken off.

4206. And there is a breach of the law in their not doing it themselves, you think?—Yes.

4207. *Chairman.*] Is it by the bye-laws that they make the men pay for it?—They have no bye-laws to the effect that a man shall pay for the timber; but it is simply that it is stopped and taken out of the man's money.

4208. Sir *Philip Egerton.*] How often are the wages paid in your district?—Once a week at the colliery I work at, and once a fortnight at the Clay Cross Colliery.

4209. Are there any drawbacks besides the timber?—There is the fund that is taken off.

4210. What fund?—They call it a sick fund, and for the school.

4211. Is it a sick fund or an accident fund?—It is both sick and accident; but if a man is sick only he receives only about a half of the benefit which he would receive if he had an accident and was injured.

4212. Mr. *Woods.*] Has the rate of wages changed in recent years in your neighbourhood?—I cannot say whether it has or not.

4213. You do not know whether they are higher or lower than they were?—I believe that the wages are about as high as they have been for some time.

4214. Would you say that the rate of wages has not risen in recent years?—I cannot say whether it is higher now than ever it has been or not.

4215. Is labour scarce?—Yes, labour is scarce.

4216. Then, if this is a special grievance at one colliery why do not the men leave it and go to another?—Some of them, and the greater portion of them, are men that have worked at that colliery for so long a time, that, so long as they can make a living, and still occupy the company's houses, they do not care to move about with their families, and they try to get along there if they possibly can.

4217. I think you said that your experience of Derbyshire was derived from five months' acquaintance with the colliery?—Just in that neighbourhood, but I have been about 12 months in Derbyshire.

4218. What do you suppose is the reason that the system of making the men pay for the props is adopted; is it, do you think, to make them economical in the use of prop wood?—I suppose that that is one point of view, and the other is for the company to get some portion of the money back towards paying for the wood.

4219. Are you working there now?—I was working there up to a week to-day.

4220. If the masters get some portion of the money back from the men, after agreeing with them for it, I suppose the men lose that money?—Yes, that money is taken off their wage.

4221. Then do you wish the Committee to understand that you were working for less wages at that colliery than you could obtain at another colliery two miles off?—I have been doing so.

4222. You wish the Committee to understand that when you were working at that colliery you were working at less wages than you could get two miles away from that colliery?—There are circumstances in it that will alter the thing; there are some places where they do not work regularly, or where small accidents occur that stop them from turning coals every day, and then, as a matter of course, it causes you to have holidays, and you do not make much money when the pay-day comes, although you may make 6*d.* a day or so more at that colliery.

4223. Then you do not wish the Committee to understand that, taking a three months' average at that colliery, you have been working for less wages at that colliery than you could have obtained at another colliery two miles off?—No; with this exception, that if you were to work at other collieries the same amount of time you would earn more; a man will make as much money there only because he will work more time.

4224. Then do you wish the Committee to understand that, at the colliery at which you recently worked, a man is willing to work more time for the same wages than at the Clay Cross Colliery, which is two miles off?—It may be that sometimes he will make a little more, and sometimes he will make only about the same amount, if it is summed up at the three months' end.

4225. Then he will make the same amount, you think, in spite of this deduction for timber at the end of the three months?—Yes.

4226. General *Dunne.*] Are not there many reasons which would induce a collier to stay, even if he were receiving less wages, rather than go to the uncertainty of changing?—Yes, there are many reasons to induce him to remain, because he will be living, perhaps, in one of the company's houses, and a working-man that has a house and a family, and is pretty comfortably fixed, and has a garden, perhaps, will, for the sake of the comfort of his family, stay there; and he will put up with little difficulties before he will run about the country.

4227. And will he be always sure to get work the moment he leaves one colliery?—He is not always sure to get work that will suit him.

4228. Are you aware of the value of these props?—No; not of the real value of them.

4229. They charge you 8*s.* 6*d.* a dozen, you say?—Yes.

4230. You are not aware whether that is a large price for them?—No.

4231. *Chairman.*] I understand your objection to paying for the props to be, not so much an objection on a question of money, as that it puts a stall man under the temptation of running a risk in order to save money?—That is just what it does.

4232. Mr. *Liddell.*] Supposing you were out of work, which colliery would you apply to first in order to obtain work, the Clay Cross, or this colliery where you now work?—Before I had worked at this colliery I should have applied there, because of the weekly pay; it is so much handier to have it every week.

4233. Then at Clay Cross they pay once a fortnight, and at this colliery once a week?—Yes.

4234. And that is the only advantage that the one has over the other?—Yes.

4235. And with the knowledge that you now possess, I understand that you would prefer the Clay Cross Colliery to the other?—I would prefer the Clay Cross now.

4236. *Chairman.*] What have you to say as to the inspection of the mines in that district, is it sufficient?

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sufficient?—The generality of the men think that the inspection is not sufficient; that is to say, that the mines are not inspected often enough.

4237. Who is the inspector?—Mr. Evans.

4238. During the year that you have been in Derbyshire, have you ever seen him in any of the mines in which you have worked?—No.

4239. Have you ever heard of his being there?—No, not in those mines.

4240. Have there been any accidents in the mines you have worked in?—Not while I have been in them.

4241 Your idea is that the inspector should come oftener?—Yes.

4242. And is that the general idea of the men about there?—Yes.

4243. What would you have an inspector do when he came to the mine?—He should inspect the colliery in every point of view, to see that the ventilation was good, and that all the tackle about the colliery was in safe condition for the security of the men's lives, and the like of that.

4244. How deep is the colliery at which you were working?—It is about 300 yards deep.

4245. How wide is it opened?—I cannot tell the breadth of all the works.

4246. How long would it take an inspector to view it, to go all round it?—I should suppose it would take him about six hours to go all round the workings.

4247. How often would you wish him to do that in the year?—I would wish some one to do it (and if one was not enough there should be others) about once in two or three months at least.

4248. You have not known of any coroners inquests, have you, during the time you have been working in Derbyshire?—No, because there have been no fatal accidents while I have been there.

4249. Are you paid by weight or measure?—They allow to pay us by weight, by the ton, as I have said before, and we fancy that we get very big tons.

4250. Have you a man appointed as a check-weighman?—Yes.

4251. Are there any disputes between him and the manager?—Yes, often.

4252. Although you have a check-weighman you are not satisfied that the weighing is fair?—No, we are not satisfied.

4253. Are there many cases of forfeiture?—Yes, a great many; I can mention a few if it is wished.

4254. Is the forfeiture for short weight or for dirt?—It is under the excuse of dirt and smut.

4255. You mean by "smut" the dirt that is mixed up with the coal?—Yes; I have here a statement with respect to No. 2 pit, at Clay Cross Colliery. I got it from the workmen's weighman on Saturday last; that shows the number of the pays fortnight by fortnight (*handing a Paper to the Chairman*).

4256. What do these numbers here mean?—They mean the number of the pay; suppose that last Saturday, for instance, was one pay day, it would take one number; it would not be dated from the day of the month but the number of pays.

4257. Mr. *Foster.*] They number them consecutively, you mean?—Yes, as though they commenced at No. 1 pay one fortnight, and No. 2 pay the next fortnight. Those are the numbers of the pay, and those figures in that paper show the amount of stuff they forfeited every fortnight. On an average about 100 tons or over are forfeited at that one place every fortnight.

4258. *Chairman.*] A hundred tons out of how many?—They hoist on an average about 3,000 tons in a fortnight.

4259. Then out of 3,000 tons from that colliery 100 tons on an average are forfeited?—Yes, that is simply at one pit of the Clay Cross collieries.

4260. Forfeited for what you call smut?—Yes, smut and dirt.

4261. What is the difference between smut and dirt?—The smut is a soft, black material.

4262. Sir *Philip Egerton.*] It is what is called shale, is it not?—No, it is not shale, but it is quite of a soft material; you can squeeze it up or press it into dust almost.

4263. *Chairman.*] Then the complaint is not about the weight being unfair, as far as you know?—Yes, they complain about that.

4264. They think that what they call a ton is something more than a ton?—Those tons that you see are what they call tons. Every 50 tons that a man gets when it goes into the pay office is weighed for 40 tons; they deduct a fifth out of all that a man earns on the Clay Cross collieries.

4265. Independently of any objection for dirt, you mean?—Yes, independently of that.

4266. They only allow him four tons out of five?—Yes.

4267. Upon what principle is that done?—That is done on account of the dirt.

4268. That is a general allowance?—Yes.

4269. But besides that, there is forfeiture for special carelessness?—It is called so; it is under that excuse.

4270. That is the reason that is given; they say, "Do what you will, there will always be a fifth of dirt; therefore, for five tons we shall only pay you for four, but if there is anything more than a fifth that is your carelessness, and we forfeit the whole." That is the rule as I understand you?—Yes; the masters employ a man on the bank, called the head banksman or screensman, and just whatever that man has a mind to take off a man he takes off, and the check-weighman for the workmen does not get to see this stuff at all. This man simply puts it down on a bit of paper, and delivers it into the office at night, and then whatever he has taken off is not paid for.

4271. You mean that if a waggon is objected to as having too much dirt, the attention of the workmens' check-weighman is not called to it?—No, he never sees it.

4272. Then what has the check-weighman to do?—He simply sees the stuff weighed, whether it be just or unjust.

4273. Then it is taken off, as I understand you, and it may be forfeited without the check-weighman knowing anything of it?—Yes, until night; and then whatever the head banksman delivers on his check into the pay office it is simply taken off at night from the day's work.

4274. And the check-weighman has no opportunity of discussing the thing with the head banksman?—Not the least.

4275. The banksman does not tell him at the time his objection to any waggon-load on account of the dirt?—No.

4276. What would you suggest as the remedy?—I would

—I would suggest that the check-weighman should have power to examine those things before the tub was taken off, or that none should be taken off without his knowledge, so that the men should be honourably paid for their work.

4277. You say that now the question of there being too much dirt or not is left entirely to the head banksman?—Yes.

4278. And that the check-weighman is only allowed to interfere on the point of weight?—Yes; he is there merely as a matter of form, for the power that he has.

4279. And the result of that is, that in this pit there are about 100 tons forfeited out of 3,000?—Yes, every fortnight.

4280. As to the verification of the weights, are you satisfied with that?—No; the generality of the men (I might say the whole of them) and the weighman himself still believe that the machine is not just, and they have no power to interfere; in fact, the employers will not let them examine the thing. That small paper (*producing the same*) I got from the weighman at a pit, and he told me himself, last Saturday, that one of the masters (he did not name the master) at Clay Cross, has been two or three times within the last three months and altered the machine, and said, "It is not paying, and it has not been holding out with the other, and I will make it do so." He meant that the machine on the bank was not carrying out the weight of the machine that the trucks go over.

4281. Which was it that gave the biggest weight?—He said that it was that machine that the trucks went over, but it did not appear as though it could be.

4282. The men are not satisfied that the weighing is fairly done?—No, they are not.

4283. And what would they wish, that the weights should be inspected?—Yes; by the inspector of weights and measures.

4284. That the weights should be subject to the general law of inspection?—Yes; and that any violation of the laws should be punishable.

4285. Mr. *Liddell.*] The power of forfeiting the tub or corf is to protect the masters from careless filling, is it not?—Yes, it is to some extent; but at the same time the check-weighman should have a privilege of seeing the weight.

4286. You do not propose to take away that protection from the master?—Not at all.

4287. You want the man acting on your behalf at the pit bank to have the power, in all cases, of testing whether the rejection of a tub is just; but in practice how could that be done: would you propose to put aside the disputed tub in all cases, and leave it there to be examined afterwards?—No, it would not be necessary; when the material that is turned over out of the waggon on to the screen, there is generally a stoppage at the bottom of the screen, which stops it from running immediately into the coal; and if it is bad, or if there is a deal of rubbish in it, that is the only chance that the head banksman gets of seeing it, and if there is any deficiency in it, or anything wrong, he could call the check-weighman's attention to it, and if it was just that it should be taken off, or a portion of it taken off, then I would say, let it remain so.

4288. You wish that, in all cases where the banksman has a complaint to make, the opinion of the check-weighman should be invited?—Yes; that he should have the opportunity of seeing what is taken off from the men that employ him.

4289. Mr. *Foster.*] The arrangement, as regards the men being paid for 40 out of 50 tons, is perfectly understood by the men, I presume?—Yes.

4290. It is the custom?—Yes.

4291. It is quite understood and agreed to?—Yes, it is agreed to, as far as that goes.

4292. What is the ton supposed to consist of?—It is called the 25-cwt. ton; that is a fifth more than a standard ton is; that is the imperial weight. But the men say that there are about 30 cwt. in their tons. We do not believe that the machine is just.

4293. What is the ton understood to be between the master and the men?—25 cwt. at the Clay Cross Colliery.

4294. Then are you paid for 40 out of 50 tons of those 25 cwt. to the ton?—No.

4295. It is considered, you say, that 40 out of 50 only are paid for; of what does the ton then consist?—They call it 20 cwt.; the fifth is taken off.

4296. Is that what we call the short-weight ton or the long-weight ton?—The short-weight ton; the standard weight.

4297. Therefore you are paid for 25 standard cwt. to the ton?—We are paid 20 cwt. for 25 cwt.

4298. You have a fifth deducted?—Yes.

4299. You give 25 cwt. for 20 of the standard cwt.?—Yes.

4300. Are the machines by which the coal is sold to the public under the revision of the inspectors of weights and measures?—I cannot say; the coal all goes away in trucks.

4301. General *Dunne.*] Do you think that this one-fifth of dirt, if you may call it so, is a fair deduction?—No, I do not allow that it is.

4302. It is more than what is fair and just, you think?—Yes.

4303. Is the machine adjusted to weigh 25 cwt. to the ton or 20 cwt.?—There are three machines on that colliery; two of them are fixed to 20 cwt. to the ton; the other machine at the No. 4 pit is fixed to 25 cwt. to the ton, so that the discount is simply fixed in that way; that all the coal is paid for, but it is fixed at 25 cwt.; and in the other case, where it is fixed at 20 cwt., when the men are paid in the pay office, if there is 50 tons it is paid for 40 tons, and so forth.

4304. Has the weigher on the man's part any means of ascertaining whether it contains 25 cwt. or 20 cwt.?—One machine is adjusted by the masters to weigh 25 cwt., but the man is not allowed to adjust it in any other way, except by permission of the masters.

4305. He cannot tell whether it is correct or not?—No.

4306. You would subject it to the inspector of weights and measures?—Yes.

4307. *Chairman.*] If the head banksman was to call in the check-weighman every time he saw that the load of coal was dirty, would it not take a good deal of time?—No.

4308. He only sees it, you say, when it is turned over upon the screen?—Yes.

4309. He then notices that the coal is dirty; if he were to call in the check-weighman, and say "Look at that coal, I cannot allow for it;" and if the check-weighman did not agree with him, and there was any discussion between them,

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that would take a great deal of time, would it not?—I do not suppose it would take much time in discussing it, because when the banksman knew that it would be punishable to take off the products of a man's labour from him unjustly, I believe he would submit to the right view of the thing.

4310. In what do you suppose that it is to be punishable?—If he may stand there and take the man's stuff off him at his option, it is, as a matter of course, robbing the workman.

4311. It is left to the man's discretion; but he may, I suppose, use that discretion honestly; the workman is not necessarily robbed because the waggon is forfeited?—Not if it is justly forfeited; but there are not very many men that will deal justly with both sides, when they only work for one side, without a witness on the other side.

4312. Is it not a great object in the profitable working of a coal mine, that the coal, as soon as it comes up, should be turned into the screen and sent off as quickly as possible?—As a matter of course it is so generally.

4313. And if there were differences of opinion between the head banksman and the check-weighman there might be delay?—I do not believe that there would be delay in reality.

4314. You think that the men's check-weighman should see the coal weighed properly?—Yes.

4315. General *Dunne.*] In cases of difference could not the tub be laid aside till evening?—Yes, it could, if there really was a dispute; but it would not be often, I fancy, that there would be one.

4316. *Chairman.*] You say that they only find out the quantity of dirt after the tub has been turned on the screen; could you put it aside after that?—It could lie there.

4317. But then that screen would be useless for the working of the coal, would it not?—It might be so if there was a discussion held; but I have very great doubt that there would be a discussion at all.

4318. But at any rate it would be some security to the workmen if the check-weighman could only see it?—Yes, even without any discussion.

4319. You said that you left the place of which you have been speaking a week ago?—Yes.

4320. Have you any objection to tell the Committee why you left it?—No, I have not. The reason that I left it was this. When a man's stall or place takes weight, that is to say, when the top weighs down (and sometimes the stalls will take weight suddenly), if it takes weight in the night time, there is no person, if you are working by day, to look after it and attend to it, and if it breaks down they want you to get up that stall for nothing, and you have nothing over for that. Even at the time that you are working, and all is right, you can make but a bare day's wage, so that you can make no interest while you are working to stand those losses, if anything should occur, and as a matter of course you cannot stand them. Our place broke down, and we had some dispute about getting it up with the head viewer, and then from the head viewer we were sent to the proprietor, to see if he would give us anything for it; and he said, no. We will suppose that a stall is started on the level, which it is first driven from. Our stall is about 80 yards long, which is a great length for just one small company of men to work. The viewer told the proprietor in this case that they always once take weight any how, if not more, from the time that they are first started, the length and the breadth of the stalls being so and so. That causes it to make a low send to it and to break down, and it broke down in this case, and the head viewer told the proprietor that it was not our neglect; he told him in our hearing that the place had come in, and that it was a natural consequence.

4321. A natural consequence of the size of the place?—Yes; and the proprietor said, "If you do not like it, you must leave it."

4322. Is there anything else that you wish to state to the Committee?—There is the question of the pit club, the fund that was alluded to some time ago. The money for that the masters take off us whether we will or not, and, as a matter of course, we would like to get that altered.

4323. You mean that there is a forced deduction for the club, and they keep the management in their own hands?—Yes; they keep it in their own hands, and we must know nothing at all of how the money goes, or what becomes of it; they must have 1*s.* a fortnight from every man, and they say that that is for the sick and accident fund, and for the school.

4324. And they do not give any account of it?—They do not give any account, and will not.

4325. Have you anything to suggest as to the management of that fund, supposing there is to be such a fund?—That the workmen should have it in their own hands.

4326. That there should be no compulsory fund at all?—No.

4327. That it should be left to voluntary subscription?—Yes.

4328. Have the workmen a fund of their own, in their own management, besides?—Yes; many of them belong to funds of their own of different descriptions, sick funds and accident funds.

4329. Is the object of the masters, in having this compulsory fund, to keep the workmen away from joining unions?—I cannot say whether that would be their object.

4330. But do you conceive that the master makes a profit out of this shilling which they retain?—Yes, as a matter of course they must.

4331. Mr. *Foster.*] Would you desire that the Legislature should, by an Act of Parliament, prevent an employer from stating the peculiar circumstances under which he will employ labour, and prevent him from making it a consequence of the men being employed in his mine that they shall pay 1*s.* a fortnight to a club, if he so pleases?—We should like it to be left optional with the men.

4332. Would you wish the Legislature, by Act of Parliament, to preclude an employer from making any arrangement he thinks proper in the conduct of his work, to the effect that so much shall be paid for a club or any other purpose?—No; I would not take it entirely out of his hands in that light that you are now alluding to. It is this that I object to; it is made compulsory; we have to pay it whether we will or not, and we get little profit from it.

4333. Is it not optional with every man whether he will engage with an employer on his employer's terms or no?—Yes; but those terms are not stated to him when he is engaged.

4334. Are you not perfectly aware when you engage that you will have to pay 1*s.* a fortnight to a sick club?—In some instances not.

4335. Are

4335. Are you not, in all instances?—No.

4336. Do you mean to say that a collier ever engages himself in ignorance of the circumstances under which he will be placed in his new employment?—In some instances.

4337. During the 26 years that you have been a collier, did you ever engage yourself without knowing that you would have to pay so much a fortnight to a sick club?—Yes, until the fortnight has come round, and then I have found it out.

4338. Have you ever given notice to leave your employer in consequence of that knowledge?—No, not in consequence of that altogether.

4339. Have you not the remedy in your own hand?—You could leave your work, of course, and go away somewhere else.

4340. Then you would wish an Act of Parliament to prescribe that there shall be no such arrangements under any circumstances made by an employer with his men?—That there should be nothing done on the part of the master to stop the men's money off.

4341. Not even if the men and the master consent to such an arrangement?—If they consent, I would say, yes.

4342. Has not the man an equal voice with the employer in making the arrangement now?—No, the men have not; the arrangement is made all on one side.

4343. Is not the contract an optional one on both sides; has not the man as much a voice in the contract as the employer?—Yes.

4344. Sir Philip *Egerton.*] Who manages this fund that you have spoken of?—The proprietor.

4345. To whom do you make application when you require to draw money for sickness or accident?—You make it at the pay office; or rather you do not make application there first, you make an application for the doctor, and then you get a note from the doctor to present before you are paid.

4346. You take that note to the pay office?—Yes, to the pay office.

4347. Then is the paymaster empowered by the owner to admit persons to the benefit of this fund?—As a matter of fact they admit them all when they engage them, because the money is taken off every man that works when the paying time comes.

4348. You say that the manager takes this money, but that the paymaster pays it. Does the paymaster consult the manager?—What I mean by the manager, is the manager at the pay office; the money is taken there, and the money is paid there.

4349. I think I understood you to say that some of this money went for the support of schools?—Yes, they say so.

4350. How much?—2*d.* a week or 2*d.* a fortnight.

4351. How do you get admission to the schools for children?—You simply get admission by sending them if you live in the Company's houses.

4352. Then all those parents who belong to this mine have education provided for their children out of this fund?—Yes, for their small children; that is to say, for those that go to school before they begin to work.

4353. Without paying any additional fee?—Yes, without paying any additional fee.

4354. Then is it one of your objections that a man who has no children should pay the same money to this fund as a man with a large family?—Yes, that is one objection.

4355. But your principal objection is that the contributors to the fund have no control over the management of the money?—That is the main objection.

4356. *Chairman.*] What reason have you for saying that the employers gain by this 1*s.* a fortnight?—I cannot give any reason.

Thursday, 3d May 1866.

PRESENT:

Mr. Clive.	Mr. Greenall.
General Dunne.	Mr. Kinnaird.
Sir Philip Egerton.	Mr. Liddell.
Mr. Fawcett.	Mr. Neate.
Mr. Wm. Orme Foster.	Mr. Hussey Vivian.

CHARLES NEATE, Esq., in the Chair.

Mr. Joseph Booth, called in; and Examined.

Mr. *J. Booth.*

3 May 1866.

4357. *Chairman.*] What are you?—A miner.

4358. A working collier?—Yes.

4359. Where do you work?—At Mr. Bradbury's Colliery.

4360. How long have you worked there?—About 10 years.

4361. What do you call that colliery?—The Hyde and Haughton Colliery.

4362. Where is that?—At Hyde, in Cheshire.

4363. Where did you work before?—I was brought up in Yorkshire.

4364. In what district of Yorkshire?—Hulmparth.

4365. Is that in West or South Yorkshire?—In West Yorkshire.

4366. Did you begin life as a working miner in the West of Yorkshire?—Yes.

4367. At what age did you begin?—Betwixt nine and ten.

4368. Have you worked in any other collieries?—Yes, I have worked in Barnsley, South Yorkshire.

4369. What are the points upon which you chiefly desire to give evidence to the Committee?—Upon the ventilation and better inspection, and the long hours of the boys.

4370. We will take first, the long hours of the boys; how many men are employed in the colliery where you are now?—About 20.

4371. That is a very small one then?—Yes.

4372. Taking the district that you represent, how many men are employed in it?—Between 3,000 and 4,000 men are employed.

4373. What district should you call it?—The Ashton-under-Lyne district.

4374. Have you any means of knowing what proportion of boys there are employed in that district?—I think it would be about 2,000 in the district.

4375. Two thousand boys to 3,000 or 4,000 men?—Yes.

4376. Up to what age do you call them boys?—Under 17 years of age.

4377. Under 14, how many are there?—I do not know exactly.

4378. There are a good many, however, I suppose?—Yes.

4379. How many under 12?—I do not know that exactly. In the separate pits we run about nine boys to a pit, of boys about 12 years of age.

4380. In your own pit, how many have you under 12?—I do not know that we have any under 12.

4381. In the pits with which you are best acquainted, is it common to have them under 12?—No, the masters have not received them under 12 years of age since the Act.

4382. Did they before the Act?—Yes, before the Act they had them at 10.

4383. Since the Act you have no complaint to make of the boys being taken under 12?—No, not to my knowledge.

4384. Where they are taken under 12, do you know whether there is a certificate required?—No, I do not know of its ever being required.

4385. At 12 years of age, what are the hours of labour?—Ten hours full work.

4386. When do they begin?—They commence at six o'clock.

4387. And when do they come out of the pit?—They cease work at four o'clock.

4388. What are the drawing hours of the mine?—About 11 hours.

4389. What are the working hours of the miners?—Ten hours.

4390. The drawing hours you say are 11; then I suppose the boys stay down longer than the men?—Some portion of them.

4391. What is the work that the boys do?—They jenny the waggons up and down the incline, and drive ponies, and so on.

4392. Are there many inclines in these mines?—Yes.

4393. Are the waggons let down by a winch?—Yes, they use a balance.

4394. Is that work that a boy between 12 and 14 is able to do?—Yes.

4395. It is not beyond his strength, you think?—No.

4396. And the driving of ponies is not beyond his strength?—No.

4397. Do they do any work beyond their strength?—Where the mines are very steep, it is out of the question for the boys to do the hurrying.

4398. The boys cannot do that work, you mean, where the mines are steep?—No, they cannot do the filling for the men, and the hurrying in these mines; we want men for that work.

4399. As far as you know, are the boys often put to work above their strength?—In those little mines they are.

4400. What sort of work above their strength have

have they?—In some places they have to go a great distance. The mines are not exactly what you may call level, but some of them go down an incline of an inch or two in the yard, and it is hard work for boys of their ages to push the waggons up.

4401. Where they are not steep enough to have a winch, you mean?—Yes.

4402. And where there is not a sufficient height for ponies to be employed?—Yes.

4403. Are these thick mines that you allude to?—No, they are thin mines that I am speaking of now.

4404. Of what thickness?—Perhaps two feet.

4405. What is the average thickness of the mines you are speaking of?—That which I work in is 6 feet 6 inches; and we run down to 16 inches; they vary much.

4406. Do they work a seam of 16 inches?—Yes, we are working a seam of 16 inches at the place that I work at now. We are working different mines all in one shaft.

4407. How far will you work up the seam of 16 inches?—In the case of that seam of 16 inches, we have to make the road higher where we take a tub.

4408. In those thin mines it requires boys, I suppose?—Yes, it requires boys.

4409. You say that the hours of the boys are, upon the whole, about 11 hours?—Yes.

4410. Are they often exhausted with their work at the end of the day?—Yes, in the thin mines they are.

4411. Do they go to school after 12 years of age, at all?—No.

4412. Do you mean never, or not usually?—I do not know of any that go to day schools.

4413. They go to Sunday schools, do they?—Yes, we have some that go to Sunday schools.

4414. But you do not know of boys in this district going to day schools at all after 12?—No, I do not.

4415. Are there any women employed in your district?—No.

4416. How long have they ceased to employ women, or did they ever employ them?—Not since I removed to Cheshire.

4417. Is that the act of the masters, or the act of the men; is it because they cannot get women, or because they do not choose to employ them?—There is other employment for them.

4418. And you do not know of any attempt on the part of the women to get employment at the mines?—No.

4419. And if they were to apply, the masters would not take them?—No, I do not think they would.

4420. What other employment is there for the women in this district?—There is manufacturing; there are cotton manufactures.

4421. Mr. *Liddell.*] With regard to that work which you have described, of pushing the tubs up the incline when you were working this very shallow seam of 16 inches, would it be possible that that work should be done by men?—No; the wage that we receive will not allow us to pay the expense of a man filling the tubs.

4422. But even if you paid a man to fill them, could a man do the work?—I do not think that he could until the roads were made larger.

4423. What is the height of the roads?—Perhaps 30 inches, or a yard, and so on.

4424. That would cause a full-grown man to stoop to such an extent that he could scarcely do the work, I apprehend?—Yes, it would be painful for him.

4425. Mr. *Greenall.*] Did you not say that 20 men were employed in that colliery in which you work?—Yes, in that colliery.

4426. If there are only 20 men, how many boys work against those men?—When I am speaking of these mines I am speaking not exactly of the isolated pit that I work at, but of the district, and the number that there are in the district that I represent.

4427. You spoke, did you not, of 20 men working in the mine in which you are employed?—Yes.

4428. How many boys work against those 20 men?—I did not say that there were 20 men working in these low mines; boys that are in the low mines where I work are very few, because we have only a few men that are in those mines at all.

4429. You mentioned 20 men; can you, of your own knowledge, tell me how many boys are employed to those 20 men?—In those 20 men we have about nine boys.

4430. Of what age?—Some of them will be above 12, up to 17 years of age.

4431. Speaking of boys under 14, how many are there of such?—I do not think that we have above four that are under 14 that work at our place.

4432. Mr. *Foster.*] When you spoke of 20 men in the colliery, did you mean 20 men in the pit that you work in?—I meant 20 pickmen.

4433. That is not the entire colliery?—That is the pit that I work at, not the entire colliery.

4434. Sir *Philip Egerton.*] In the case of these steep inclines to which you have alluded, do the boys ride on the waggons?—No, it is prohibited.

4435. The jennying is not done by applying a break to the waggons, is it?—Yes, it is.

4436. Who applies the break?—A boy at the top.

4437. Not a boy riding with the waggon?—No.

4438. Do they ever adopt a double tram, so that the loaded waggons going down one tram shall draw up the empty ones upon the other tram?—No, we work with a balance to draw up the empty waggon, and then the full one pulls up the balance.

4439. *Chairman.*] Who employs the boys in this district usually; are they employed by the masters, or are they employed by the men?—The masters employ the jenniers and horse lads, and the men employ those who fill for them.

4440. And they are usually, or very commonly, I suppose, their own sons?—Yes; some of them.

4441. Who receives the wages of the boys that are employed by the men?—The boys themselves, when the men are not their own parents.

4442. Have you anything more that you wish to add on the subject of the boys?—We want their hours shortened.

4443. What do you think is the proper number of hours?—Eight hours.

4444. Up to what age?—Up to 14.

4445. You say that the men now work 10 hours?—Yes.

4446. Supposing that the boys only worked eight hours, could the men go on profitably working 10 hours?—Yes, I believe they could; I believe that we could get our stuff out in eight

Mr. *J. Booth.* hours with the boys and allow them to give over then.

3 May 1866. 4447. How would you reduce the labour of the boys; by making them go later into the mine, or by making them come out sooner?—By making them come out sooner.

4448. If they came out sooner, there would be an accumulation of coal the next morning to take away, would there not?—Yes.

4449. But you think that, although the boys come out two hours before the men, the men might go on working and cutting the coal?—Yes.

4450. But how would you manage with regard to this accumulation of coal the next morning?—The men could do a bit for themselves in the large mines.

4451. You would have them do some of the work of the boys when the boys were gone?—I believe they would in some instances.

4452. They would bring the coal up the inclined plane; is that what you mean?—No, not in those little mines; it is impossible in those mines. What we want is, for the boys to work shorter hours, and to go to school to be educated.

4453. After 12 years of age?—Yes.

4454. And you think that that might be done without shortening the hours of the men?—I can see how it could be worked, as far as I am concerned.

4455. Will you explain as clearly as you can to the Committee how you could shorten the hours of the boys without shortening the hours of the men?—Suppose that I am working in a heading, my boys can take away in eight hours the stuff that I can get in 10.

4456. Who would be holding the tubs during the hours that you are working after he is gone?—These boys that work short hours would be under 12 years of age, and very few of them would be working for the miners; they would be the owners' boys.

4457. But who would be heading the tubs, the miner himself, or the hurrier?—The hurrier.

4458. The hurriers are about 14, of course?—Yes, of course.

4459. Do you think that the boys in eight hours could carry away what the miners and the hurriers would have cut and headed in 10 hours?—Yes.

4460. You would have the boys, as I understand you, go to school after 12 years of age?—Yes, from 12 to 14.

4461. Mr. *Greenall.*] What wages does a boy of 17 years of age get?—About 2 *s.* 6 *d.* a day.

4462. And what is the lowest payment that a small boy gets?—A small boy would get 1 *s.* a day.

4463. Sir *Philip Egerton.*] Would there be any difficulty in employing boys under 14 in shifts; say for instance, that one shift should go down till the dinner hour, and a second shift after dinner, in that way shortening the hours to, say, six hours for each gang?—I do not believe that a man can work 12 hours.

4464. Would there be any difficulty in having a change of the boys, so that, instead of the boys working continuously for 11 hours, one gang should work half the time, and then be replaced by another gang?—I cannot see why they should not work half time just as they do at the factories.

4465. Mr. *Foster.*] Does the winding engine now work more or less hours than the men work who are actually cutting the coal?—In some places where we have a night shift the engine is required to work more.

4466. We will not take the cases of night shifts, those, I suppose, are quite exceptional?—We have night shifts frequently in some places, but not at ours.

4467. Will you answer the question with respect to the day shifts only?—I consider that the engine itself could wind more than we can do.

4468. I do not ask what it can do; but does it now, to your knowledge, work a greater or less number of hours than the men work who are employed in cutting the coal?—About the same.

4469. How many hours does the engine work on drawing coals?—The engine begins to draw at 6 o'clock and leaves off at 5 o'clock.

4470. Presuming that the miners begin work at 6 o'clock, when do they leave off work?—At 4 o'clock.

4471. Then the engine does work one hour per day more than the men do who are employed in getting the coal?—Yes.

4472. Then with regard to the boys who are employed by the owners of the mine in driving the horses and working the inclines, would not the fact of those boys leaving the mine necessarily stop the working of the engine?—No, I cannot see that. The master has other men that he could put to the work, for instance, the day-wage men could do it, providing that the boys go away before the men.

4473. These day-wage men, you think, might work the additional hour or two hours?—Yes.

4474. What would they be doing the rest of their time?—They would be working.

4475. Working where?—At their ordinary work, such as they are employed at.

4476. Do you mean down in the mine?—Yes.

4477. Then, according to that, these boys might be dispensed with altogether, might they not?—No; if you dispense with them altogether, you will make it a greater expense to the proprietor.

4478. Then what are these men who could do the work of the boys doing when the boys are employed?—These men are employed in going about repairing and so on; they are the master's men, or day-wage men.

4479. Are there a sufficient number of men employed in the mines which you are acquainted with to do the work of the boys in the event of all the boys going up from the mine sooner than they do now?—My view is this, that when the boys cease to work, (I am speaking of those that are employed by the master), the master has others above that age that are engaged in something else, and he could put them to the boys' work.

4480. What are those men engaged in?—In repairing, and some of them follow the horses; when the tubs get off the way, they lift them on; they repair the rails, and shift dirt, and remove it away when it falls; we are obliged to have those men to work in the mine, and run about, and see that the roads are kept in repair.

4481. Then that kind of labour could be altogether dispensed with, you think, for a certain portion of the day?—Yes, for that time I should say.

4482. Mr. *Liddell.*] If these boys were allowed to leave their work sooner, and a certain portion of the work that they now do had been done by men, the galleries must be made higher, in order to enable these men to work at all, must they

they not?—We are speaking now of boys under 14 years of age; boys under 14 years of age cannot hurry up those inclines, they must be 15, 16, or 17 to do that; it is the boys of 14 that are employed in driving the ponies that we want to leave sooner.

4483. *Chairman.*] You are speaking of boys of 14, but the other work in the thin mines would be done by boys of 15 or 16?—Yes.

4484. Mr. *Liddell.*] What I understand you to mean is, that there are a certain number of men employed at all times by the master in doing odd jobs about the mine, whose time is not fully employed at present, and who might do the work that was left undone by these boys, if they were allowed to leave their work rather sooner?—Yes, a certain number of those that would be over the age of the boys.

4485. *Chairman.*] Do you suppose that the master would have to put on an extra number of men, or that it might be done with the present number of men?—As far as I know, it might be done with the present number of men.

4486. They have sufficient spare time, you think, to find an hour or two in the course of the day to do the work which the boys might leave undone?—The master could pay them extra for doing it perhaps.

4487. Mr. *Greenall.*] Are your opinions formed upon the desire that the men should work eight hours a day?—I am speaking now of the present system that we are acting on.

4488. But I am asking as to your opinions?—I cannot give my opinions, except we adopted the measure.

4489. You desire that men should be employed eight hours rather than ten?—Of course I desire it as an individual, but that is not the scale that we are now working.

4490. *Chairman.*] In the changes that you suggest, you contemplate the ultimate reduction of the hours of labour of the men to eight hours, I presume, since you say that in your mind you desire that?—Yes, as an individual I do.

4491. You have told us that you wish to say something about ventilation; are you satisfied with the ventilation of the mines in the district with which you are acquainted?—In some places.

4492. What are the defects, where there are any defects?—The defects are, that the air gates are not sufficient for the men that are employed.

4493. By the air gates, you mean the air ways, do you not?—Yes.

4494. Are those ways kept sufficiently clear?—No, I do not think they are.

4495. They are not wide enough, I suppose?—They may be wide enough when made, but they are not kept so.

4496. Have you any great complaint to make upon that score?—Not for our own colliery, because we have good air where I work; but in the district that I represent there are complaints with respect to that.

4497. In that district are they large collieries?—Yes; one of them especially.

4498. How far does the working go from the foot of the shaft?—One thousand five hundred or 1,600 yards.

4499. That is about the longest distance, is it?—Yes.

4500. And the air is not carried up sufficiently at the end of that distance?—No.

4501. They all of them have a double shaft, I suppose?—Yes.

4502. Do they use the upcast shaft for the purpose of taking men up and down?—They use the downcast shaft.

4503. Do not they send coal up the upcast shaft?—No, not at those large collieries.

4504. The practice is to send the coal and the men up and down the downcast shaft?—Yes.

4505. In what way is the air carried; what is the system of ventilation?—Generally speaking, the system of ventilating is going through for one side at once.

4506. What other defects are there besides the insufficiency of the air-ways; is the bratticing, for instance, not properly done?—No, the bratticing is not done.

4507. How far have you known men work from the current of air in your own district?—I speak now for myself and my own colliery; I have worked 40 yards.

4508. You have worked 40 yards from where the current of air was, you mean?—Yes; but in a mine that makes no fire-damp, as we miners call it.

4509. That is to say, it is not a dangerous mine?—No, not for fire-damp.

4510. But does it become unhealthy in consequence of the want of ventilation?—Yes, the carbonic plagues us most.

4511. But, in consequence of the mine of which you speak not being one liable to explosion, you think that the ventilation is neglected?—No, not exactly that; but the bratticing is neglected.

4512. Who does the bratticing?—The master.

4513. That is to say, the foreman or the viewer does it; it is not left to the workmen?—The foreman orders it to be done at our place.

4514. Who actually does it?—The men have to do it.

4515. Are they properly supplied with materials for doing it?—Yes, when we have any to do.

4516. When you were working 40 yards away from the current of air, whose fault was it?—We never make a practice of bratticing unless we have sulphur.

4517. That is because you do not chose to carry on the brattice, I suppose?—No, it is not left optional with us.

4518. The foreman did not order it then in the case to which you have referred?—No, he did not order it; and we had no materials for it.

4519. I understood you to say that you had entered into the ventilation question a good deal; what suggestions have you to make about the ventilation?—As to the ventilation, we think that it ought to be a ventilation sufficient for the number of men employed; we think that there should be sufficient pure air to take away the noxious gases, and besides that, enough for a man to breathe in so that it will be healthy.

4520. The complaint you make of the air in the mines of which you speak is not the danger of explosion, but the unwholesomeness of the air?—Yes.

4521. You are not liable to accidents from explosion in the mines of that district?—Not where the carbonic is.

4522. In any part of the district are the mines liable to explosion?—Yes.

4523. Is the ventilation better in those mines?—I do not know about that.

4524. You cannot speak, then, of the ventilation of the fiery mines?—As far as I am able to speak,

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speak, the air roads are not kept in proper repair there.

4525. With regard to the question of inspection, do you now see an inspector down your mine?—I have never seen him.

4526. Have you ever heard of his coming?—No.

4527. Have there been any accidents in the mine during the 10 years that you have been there?—Yes, we have had three killed.

4528. The inspector came then, did not he?—No; I was informed by the under-ground viewer that he did not come to examine the mine.

4529. He attended the inquests, I suppose?—Yes.

4530. Do you remember the circumstances of the inquests?—No.

4531. What was the way in which the accidents occurred?—The fall of the coal in the large mine was the cause.

4532. You are not satisfied, then, with the inspection at the present time?—We are satisfied with the law, but we want a sub-inspector to see that that law is carried out.

4533. You want more efficient inspection, for the purpose of obtaining sufficient ventilation?—Yes.

4534. Mr. *Liddell.*] With regard to the nature of this gas, when you talk of the carbonic, do you mean the choke damp?—The black damp.

4535. That is a suffocating gas, not a fiery gas?—No.

4536. But it requires, for the health of the men, that there should be a sufficient admixture of air to enable you to breathe in it?—Yes.

4537. What effect has it upon a man?—The effect is, that it is injurious to our lungs.

4538. Upon going to your work in the morning, can you immediately detect whether there is a proper amount of air in the place or not?—The black damp, or the choke damp, lies at the bottom, and what we miners call the fire-damp lies at the top, that being lighter than the air is at the top; the other being heavier than the air is at the bottom.

4539. You have not answered my question: When you get to your working place in the morning, can you always tell at once, from your own sensations, whether or not the place is properly ventilated?—Not exactly from our sensations, at least not at the first; but after working in it for a time we become exhausted.

4540. Sir *Philip Egerton.*] What is the depth of the mine that you are working in now?—About 150 yards.

4541. Is that the deepest mine in the district?—No.

4542. What is the deepest?—Six hundred and eighty yards.

4543. What mine is that?—The Black Mine.

4544. So far as your knowledge goes, is the ventilation worse in the deep mines than in the shallow mines?—Yes.

4545. Is there much illness amongst the miners who work in the deep mines?—Yes.

4546. Do you attribute it to the defective ventilation?—Yes, they attribute it to that. I do not work there myself.

4547. Are they affected with a disease called miner's asthma or miner's consumption?—Yes.

4548. *Chairman.*] Do the masters employ viewers or firemen to visit the miners and see that the air is sufficient?—They employ firemen to go round and see that the places are clear.

4549. Is that work efficiently done?—No.

4550. What is the rule as to the firemen generally?—The firemen now, speaking as a general rule in our district, are men that go round the workings, and then are employed for other work in the day time.

4551. When do they go down?—They go down, perhaps, at four o'clock for the small collieries.

4552. What are their wages?—Their wages run about 4*s.* 6*d.* per day.

4553. They are day-wage men, of course?—Yes, they are day-wage men.

4554. Is 4*s.* 6*d.* more or less than the average earning of a miner?—It is less than the average of a coal miner.

4555. What can a good miner earn in a day?—Perhaps 5*s.*

4556. It is a hard day's work, I suppose, to earn 5*s.*?—Yes.

4557. They are paid rather less than the miners?—Yes.

4558. Do you consider that they are competent for their duty, supposing that they attended to it?—I do not.

4559. Do you think that they are good judges of the state of the air in the places which they are visiting?—No.

4560. Have they any means of testing the state of the air besides the smell of sulphur?—They go round with the lamp.

4561. A naked lamp, do you mean?—The Davy safety lamp.

4562. When the lamp gets into bad air it has a tendency to go out, has it not?—Yes.

4563. The firemen have no other test except the effect of the gas upon the lamp?—Yes, they can see the gas in the lamp flash up inside.

4564. That is when they come to an explosive gas?—Yes.

4565. But when they get to the carbonic gas, it is a quite different effect?—The carbonic gas will put out the light.

4566. Have they any test for ascertaining the quantity of carbonic gas?—No, I do not know that they have.

4567. You say that when you go into the mine you only find out the presence of that gas by its effect upon you?—Yes; we cannot get a light there at all when it is very bad.

4568. You spoke of three accidents; in what way did they happen?—All happened from the fall of the coal.

4569. Is the propping up of the rooms sufficiently attended to, do you think, in these mines?—It was not the roof, in those cases; that is well attended to where I work; we have a sufficiency of props, and we have all provided, where I work, that is necessary for keeping up the roofs; it was a fall of coal that caused these accidents.

4570. What was the cause of that fall?—Perhaps I may illustrate it to the Committee in this way: the mine is six feet high; there is a separate parting in it of two feet on the top, and sometimes those two feet on the top will not come when the other four feet of coal does, and it is hard work to get it down afterwards; one man was killed owing to that; he went to his work, and when he commenced to work there was a fall of coal on him, which weighed, perhaps, 4 cwt. or 5 cwt.

4571. That may have happened from his own carelessness, I suppose?—Perhaps it might be from his not examining the place.

4572. Might that have been obviated by a proper application of what you call sprags?—Yes, in this direction (*explaining it to the Committee.*).

4573. Then he had not put sprags?—No.

4574. Was it for want of having sprags at hand, or because he did not choose to put them?—I cannot say.

4575. Accidents of that kind will happen from the carelessness of workmen, will they not?—Yes.

4576. Is it your belief that they do mostly happen from the carelessness of workmen?—In some cases they may, but not altogether.

4577. In some cases you think they may happen from want of having sufficient props at hand?—Yes.

4578. Mr. *Liddell.*] Is there no system of inspection by the under-viewers of these places; is it not the duty of an under-viewer to see, from time to time, that the coal, as you describe it, has been removed from the roof?—I do not know; the firemen go round, and the under-viewer goes round to examine; but then the under-viewer cannot always be at the place, he has to go the round.

4579. But I presume that if an under-viewer visited a place in which he saw that a proper amount of coal had not been removed from the roof, he would direct the removal of that coal?—Yes.

4580. It would be part of his duty to do so?—Yes. Naturally the coal will give way with standing, especially when it is at a corner; owing to the steepness of the mine, it is weighed downwards, and it was at such a corner that both of them were killed.

4581. *Chairman.*] You have no complaint to make in respect to this district of an insufficient supply of timber for props and sprags?—No, not in our district.

4582. Is there any other point upon which you would like to give evidence to the Committee?—Yes, as regards the firemen; we think that they ought to be a better staff of men then they really are. They are not experienced men, some of them. I am not prepared to give the Committee the name now, but I could forward the Committee the name of the colliery, and all the details, where a man has been employed as banksman at the top of the pit for the last 20 years, and he is now taken and placed at the bottom as the head fireman.

4583. Never having been employed in the pit before?—Perhaps, when he was a little boy he was employed in it.

4584. You think that generally they are not competent to their work?—No, they are not.

4585. Do you suggest that any test of their competency should be applied to them?—Yes.

4586. What sort of a test of competency would you have?—I think that there ought to be an examination of them.

4587. Upon any other point, is there anything that you would wish to state to the Committee?—There is the question of the weighing clause.

4588. Have you the system of weighing or measuring?—We have measuring.

4589. Are you satisfied with the way in which the measuring is done?—No, we want the standard weight.

4590. There is a general dissatisfaction among the men with the measuring, is there?—Yes.

4591. And you wish weighing substituted for measuring?—Yes.

4592. Do you wish the weights to be under the inspection of the regular inspectors of weights and measures?—Yes.

4593. Have there been any disputes in your district between the check measurer for the men and the banksman?—We have no check measurer in our district.

4594. You say that there is a general dissatisfaction with the system of measurement?—Yes.

4595. Do you concur in the general opinion of the workmen in objecting to the measuring system?—Yes.

4596. Have you ever made complaints to the masters of your not being satisfied with the measuring?—Yes.

4597. Have those complaints been attended to?—No. In some places in our district now the men have to get 18 of the tubs, and then there are 16 booked for them; at others they get 20, and then there are 18 booked for them.

4598. But that is an understood thing with them when they accept the work, is it not?—I cannot say as to that.

4599. It is part of the rules of the colliery, is it not, that where they get 18 tubs they shall only be paid for 16?—Yes.

4600. That is to make allowance for either underweight or dirt, is it not?—Yes; but supposing that the tub holds 8 cwt., and I fill it 8 cwt. at the far end, and it meets with some accident, and it is 7 cwt. when it gets to the top, I have nothing for it at all.

4601. The whole is forfeited?—Yes.

4602. Have you anything else to state to the Committee?—We wish the employment of women to be done away with, considering it to be a disgrace to employ females on the pit's bank.

4603. I think you said that there were very few employed in your collieries?—None in ours; but the feeling of the men is to remove it away from Lancashire.

4604. We will not go into Lancashire; but I understand you to say that there is a general feeling amongst the men against the employment of women anywhere?—Yes.

4605. Have you any complaint to make as to the club system?—No.

4606. Have the men a sick-club of their own, or do the masters manage it?—We have a sick-club, but we manage it ourselves.

4607. Have you anything to say about the composition of juries?—No, not in our district.

4608. You have heard no dissatisfaction expressed with the verdicts of juries?—No, not in our district.

4609. There have not been many accidents, you have told us?—No, not at that pit where I work.

4610. Your chief complaint then, as I understand, is with reference to the over hours of the boys, and the imperfect ventilation in regard to the health of the miners?—Yes, and the weighing.

4611. Mr *Liddell.*] What is the measure that is applied to the coals; is each corf or tub supposed to contain so many hundredweight?—Yes, we have some 4 cwt. for the smaller mines, and 8 cwt. for the larger mines, and some 6 cwt.

4612. What are the steps taken on the part of the cranksman to see whether the tubs are properly filled or not?—If they are not properly

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filled, he just does this, he takes away the motty and puts it in a tub and sends it back again.

4613. When I spoke of the banksman seeing whether the tubs were properly filled, I meant also whether they were filled with pure coal, or whether there was any admixture of dirt?—Sometimes the banksman will take them up for dirt, but I am speaking now of cases when they are not full.

4614. Mr. *Hussey Vivian.*] Is that motty, to which you allude, fastened into the bottom of the tub?—In some cases it is, but in some cases it is made of wood.

4615. It is the motty that is sent down the pit to the man and not the tub of coals?—No; he has not the opportunity of filling it up; he loses the whole of it.

4616. *Chairman.*] By the motty coming back you understand that that one tub is forfeited?—Yes.

4617. It is to give you notice that they have not carried your motty to account, and that they do not score you one for that tub?—Yes.

4618. Have you anything more that you wish to say?—Only this, that I believe that some of the masters, as well as the men, are desirous of having better inspection. It is the feeling of the masters that I now work for.

4619. You believe it to be the feeling of the masters, as well as of the men, that there should be better inspection?—Yes.

4620. At any rate, it is the feeling of the men?—Yes, and it is the feeling of the masters that I work for.

4621. Mr. *Hussey Vivian.*] In the event of a tub not being properly filled, what would you propose?—We propose that we should have a just weight, and that we should be paid for the weight that comes to the top.

4622. But does not great loss occur to the master if a man does not properly fill a tub?—Yes.

4623. Would it be possible to conduct the operations of a large pit, if the tubs were continually half filled?—No; but I am speaking now of accidents that happened to the tub after it has been filled by the miner; sometimes the tub has to be jennied down an incline of two feet in the yard, and sometimes they get off the rail, and the entire tub is kicked over, and you cannot fill it up.

4624. Does it not more frequently happen that a tub is short filled?—No; I do not think it does.

4625. Is it not a part of the discipline of the pit to insist upon tubs being properly filled, so that the operations of the pit may not be impeded?—I believe that the men who employ the boys would rather that they should put 1 cwt. more on, than that they should lose the 8 cwt.

4626. How could the operations of a pit be properly conducted unless there was some discipline, and this among other rules, because only a certain number of tubs can be filled in a day, I presume?—Yes.

4627. If some of the tubs were only partly filled, would not all the expense of tramming and drawing be lost to the master?—The expense of tramming and drawing is to the men.

4628. It does not all fall on the men, does it?—No; there are the men for the horses, who are employed for the master.

4629. Would not the expense of winding, and so on, be lost to the master on those tubs that were short filled?—He might lose coal by it, of course.

4630. It is a part of the discipline of the pit, that the tubs should be properly filled, is it not?—Yes.

4631. If men neglect to fulfil their duty, what would you propose, in order to control the men, in lieu of the rule by which at present they are fined?—I do not know that the men would complain of the rule, if they filled the tubs short themselves, but it is when they know that they are filled, and they meet with an accident, perhaps, and lose some of the coal.

4632. You must look at the other side. I want to know how you would keep up the discipline of a pit, and avoid the possible idleness of men in filling their tubs incompletely, under the system which you propose. How would you propose that the case should be dealt with, of a man who ought to fill 8 cwt., and does fill only 7 cwt.?—I consider that he ought to have 7 cwt. for it.

4633. Then you must admit that the master will lose upon the deficient weight, because all the expenses of the master would be upon 7 cwt. instead of upon 8 cwt?—Yes; necessarily so.

4634. Then how do you propose to deal with the case, in justice to the master, looking at both sides?—We do look at both sides.

4635. How would you propose to punish a man who invariably, or very frequently, filled his tub too light?—I do not know what system to adopt, except the weights.

4636. Then you would allow the master to lose the difference?—The master has a just weight to sell by, and we should have a just weight to be paid by.

4637. That is quite right, but I want to know how you would deal with the case of loss to the master through the imperfect filling of the tubs?—I believe, for my own part, that more comes over than comes under, and I should say how does the master deal with the men in that respect?

4638. You would propose to average the tubs of each man?—Yes.

4639. Then, supposing that on the average they come too short, what would you propose to do?—As an individual, if any master ever told me that I had filled the tub too short, I should say that I would stand the loss of it

4640. That is just; but my question is, what would his loss be; how would you recompense the master for that loss, or what would you allow him for his loss, through a man filling the tub short?—If I fill it short, I do not want anything for it as an individual.

4641. Yet that is just the present system which you object to?—Yes.

4642. *Chairman.*] As to the loss by accident through the tubs being upset, you would be equally liable to that if you had the weighing system, would you not?—Yes; but if we had the weighing system, we should have the weight that was in it.

4643. Still, you would be liable to have the tub wholly upset; that happens sometimes, I suppose?—Yes, that happens sometimes, and we should lose it then.

4644. That does not often happen; it is more frequently the case that some is shaken out, or knocked off by the roof; is that so?—Yes.

Mr. JAMES WILKINS, called in; and Examined.

4645. *Chairman.*] WHAT are you?—A working collier.

4646. In what district?—At Cinder Hill Colliery in the Nottinghamshire district.

4647. Who are the proprietors?—Mr. North is the proprietor.

4648. Is it a large colliery?—Yes, it is an extensive colliery.

4649. How many pits are there in it?—Under Mr. North there are three.

4650. In what pit do you work?—At Cinder Hill pit.

4651. Is that a deep pit?—It is nearly 200 yards, I think.

4652. How long have you worked there?—Between 13 and 14 months.

4653. Where did you work before?—I worked at Hucknall.

4654. Where is that?—That is in the Nottinghamshire district, under Mr. Helliers.

4655. Have you ever worked out of Nottinghamshire?—Yes, I have worked in Leicestershire.

4656. Is there any difference between the system in Leicestershire and that in Nottinghamshire?—Yes; in regard to getting coal the systems are quite different.

4657. Have you ever worked in any other pits?—Yes; I have worked in Staffordshire.

4658. How long have you worked in Staffordshire?—I have worked there twice, four years off and on.

4659. You came here, do not you, to speak of Nottinghamshire?—Yes.

4660. Are there boys employed to a great extent there?—Yes.

4661. When we are speaking of boys, let us speak of boys under 14; how many are there under that age should you say to 100 men?—Fifteen or 20 boys to 100 men.

4662. Of course you cannot speak with certainty, but how many of those 20 boys would be under 12?—I do not think that we have any under 12.

4663. There may be occasional cases, but you know of very few under 12; is that so?—There are not any under 12, to my knowledge.

4664. Between 12 and 14, you say that there are about 20 to 100 men?—Yes.

4665. How many hours do those boys work?—They reckon to work from six to six on the average. I should think that some of them are from 14 to 15 hours away from home. Some of them live very near to the colliery, and it does not take them quite so long. They are 12 hours in the pit; they go down at six, or between five and six o'clock, and leave work again at 6 o'clock.

4666. What are the hours of the men in those pits?—I can scarcely tell; some will work 12 hours or less, and some will work 15 or 16 hours.

4667. What are the hours for drawing coal?—Twelve hours.

4668. Beginning at six and ending at six?—Yes.

4669. What is the work of the boys, from 12 to 14, in the mine?—It is a large extensive pit. I should think it is nearly two miles to the far end, and there are some boys engaged in the same way that the witness before me has described, in jennying or jigging, as we call it. They are also employed in driving ponies and horses, and so on.

4670. You are speaking now of the boys that are employed by the masters?—Yes.

4671. Then there are boys also employed by the miners themselves?—Yes, there are boys employed by the stallmen themselves; the stallmen reckon to find the boys to tram their jennies, and the master finds the boys that take the full ones off, and put the empty ones on; but the master finds the main jennies.

4672. The stallman finds the boy who does the partial jennying?—Yes, but the master finds those who do it in the main road.

4673. What other work do the boys do besides jennying and pony driving; do they do any work that is above their strength, in your opinion?—They have too much to do.

4674. Do you mean that it is too long work?—Yes, too long and too laborious.

4675. What part of their work is too laborious?—They are left to lift the waggons themselves, a good many of them, and often it is impossible for one man to manage it; sometimes I cannot manage it.

4676. Have you known boys hurt by straining themselves in that way?—Not to my knowledge.

4677. But you think it too hard work for them?—Yes.

4678. Do any of them go to school when they come out of the pit?—Very few; they have not much time after 12 or 13 hours work; and they are so fatigued that, on the Sunday, they generally lie in bed the greatest part of the day.

4679. They do not go to school then on the Sunday?—Not generally.

4680. What is the state of education among them?—It is very bad; I think that out of 20 there is scarcely one that could read and write his own name.

4681. You are speaking now of boys over 12 years of age?—Yes.

4682. Do the boys between 12 and 14 know more than the boys above 14, do you think?—At 14 the boys are very ignorant, and above that age, because when they get from 14 to 15 they are above going to school.

4683. So that the older they get the more ignorant they get?—Yes.

4684. When they get to 12 years of age, they have been to school, I suppose?—Some of them have been to school.

4685. But you say that the state of education among the boys and youths is very bad?—It is very bad where I come from.

4686. Are any women employed there?—No.

4687. Mr. *Fawcett.*] You say that very few of the boys in these mines are under 12; do the boys work generally at other work before they come into the mine?—Not many of them, I think; some do in the factories at Nottingham.

4688. You say that they do not work till they are 12 years old, and yet that they are very ignorant at that age; I suppose, then, that they do not go to school till they are 12?—I am not prepared to answer that question.

4689. Do you think that if a boy went to school till he was 12, he would get the rudiments of education and be able to read and write?—I should think he might.

4690. Are schools scarce in the district, or is the fact to which you have alluded the fault of the parents?—I think it is, to a great extent, the fault of the parents.

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4691. Mr. *Liddell.*] No boys come into the collieries with which you are acquainted, under the age of 12?—Not to my knowledge.

4692. Mr. *Vivian.*] You are aware, are you not, that there are certain restrictions under the Act, as to the employment of boys in collieries in reference to their education; that the boys cannot be employed under 12 years of age unless they can read and write?—I am aware of that.

4693. You are aware also, that that is not the case in factories and other industries throughout the country?—Yes, I am aware of that.

4694. Do you see any reason why that rule should apply to collieries and not to factories and other employments?—No, I do not see any reason for it.

4695. Would you propose that the rule in reference to education should be made general in its application, and not be confined to collieries only?—Yes.

4696. Do not you think that it places collieries at a disadvantage if they are so restricted?—Yes.

4697. That it is unfair, in point of fact?—Yes.

4698. *Chairman.*] How many hours would you allow boys under 14 years of age to work?—I think eight hours work is plenty.

4699. Do you think that could be done without shortening the hours of the men?—Yes, I do.

4700. Have you any opinion as to how many hours the men ought to work?—I should not advocate working above eight hours myself; eight hours work is plenty for both men and boys.

4701. But you think that the boys' work might be confined to eight hours without cutting down the hours of work of the men?—Yes, I do.

4702. How would you supply the place of the boys after they went, supposing that the men worked 10 hours, and the boys worked eight, how would you get the other two hours' work provided for which the boys would have done if they had stayed down?—I do not think that it would injure the men, because our pit is very often lying idle for the want of stuff; the men generally go down at 3 or ½ past 3 o'clock, to get stuff ready; and on other days several stalls are lying idle, and perhaps the pit will have to stand half a day.

4703. You think that the carrying work would be done in eight hours, for the stuff which was cut in 10 hours?—Yes.

4704. And, therefore, that you might reduce the work of the boys to eight hours without interfering with the work of the men?—Yes, I think so.

4705. Mr. *Vivian.*] Would there be any difficulty in having a double shift of boys?—I think there would, it being such a large pit.

4706. What is the system of working adopted in your pit; is it the stall and pillar system?—No, it is stall work; the stall is of great length, sometimes 50 or 60 yards.

4707. Then it is the long-wall system?—Yes.

4708. Have you ever worked on the old stall and pillar system?—No.

4709. *Chairman.*] Have you anything to say about the ventilation of the mines with which you are acquainted?—No, I cannot complain of the ventilation where I work; it is pretty good upon the whole.

4710. Are the mines with which you are acquainted, mines liable to explosions, or are they mines subject to bad air?—Some parts of our mine are subject to gas.

4711. And in the other parts are they subject to what you call black damp?—No, we are not much troubled with that; it is gas that will explode.

4712. You have no complaint then to make about ventilation?—No.

4713. As to the propping of the roofs, are you properly supplied with timber for making props?—I think not; the men have to find their own wood.

4714. Where do they bring the wood from?—They are obliged to have it of the masters.

4715. Where have they to go and fetch it?—They have to go and order it at the wood yard, and then carry it.

4716. The wood yard being at the mouth of the pit, I suppose?—No, it is perhaps 100 yards from the pit, but then there are gang roads to it.

4717. Will you explain to the Committee in what way a workman in these collieries gets his supply of wood?—He has to go to the wood yard and get it cut; and then he carries it and puts it in waggons, and marks it where it wants to go to.

4718. Who takes it?—The master's man takes it, but the men have to pay him. That man works on the hill, and you have to pay him, perhaps, 6 *d.* a dozen to take it to the pit's mouth; but where I worked before, the men had to carry it to the pit's mouth.

4719. Where you are working now you have to pay for it, but the master takes it?—Yes.

4720. Does he take it to your stall?—Yes, it is taken to the stall.

4721. But you have to pay for that?—You have to pay for getting it to the pit mouth, that is to say, to the top.

4722. And you would not be allowed to get it elsewhere?—No.

4723. How much have you to pay for it?—Perhaps 6 *s.* or 7 *s.* for half a dozen; something like that.

4724. Do you suppose that you could get it cheaper anywhere else?—We do not think of trying, and for that reason we have never inquired.

4725. Does the viewer see that you have a proper supply of wood?—No, the viewer does not interfere with that.

4726. If the viewer comes round and sees that you are not properly supplied with wood, will he not take notice of that fact?—I have known cases of that sort, where the viewer has noticed that there is not sufficient wood.

4727. Are you fined for that?—No. The viewer will tell you that wood is wanted, and he would give you a note, and you must order it.

4728. Can you get the wood on your own judgment, without an order from the viewer?—No, you are not allowed to do so.

4729. Have you known accidents to occur in the mines with which you are acquainted from a want of sufficient propping?—No, not since I have been at the place.

4730. Then you have no complaint to make about the wood, except that you have to pay for it?—I think it would be a deal better if the master found the wood, because I think the men run the risk in many instances of their lives; owing to the wages being so low where we are, they will make any shift so long as they can, till the fortnight's end; and then perhaps they will order it.

4731. Do not you suppose that if the master were to find the wood he would take something off the wages?—If he were to take much off the wages of the stallmen where I come from he would take it nearly all. I am sorry to say that we stallmen have as low wages as we can possibly get.

4732. May I ask how much a man can earn in a good day's work in the collieries of which you are speaking?—It varies.

4733. What does a good workman who works 10 hours get?—Some of them do not more than perhaps 1 *l.* or 25 *s.* a week; and I have known men, and good men too, go home with not more than 25 *s.* for the fortnight, and sometimes not 1 *l.* There is great difference in the places.

4734. You think that in consequence of those wages being so low, the workmen are very unwilling to diminish their wages further, by having to pay for wood?—Yes.

4735. Therefore they put off asking for wood longer than they ought?—Yes, they do.

4736. But you have not known many accidents, or, in fact, any accidents arising from the want of wood?—Not since I have been there.

4737. Mr. *Clive.*] What is the most that you have ever heard of a man earning in a week; you have told us the least and the average?—I dare say some will manage to get 2 *l.*; 30 *s.* perhaps, I should say.

4738. *Chairman.*] How many hours would a man have worked for that?—Perhaps 12 or 14 hours.

4739. Mr. *Liddell.*] Is your coal a very hard coal to cut?—A very hard coal indeed.

4740. *Chairman.*] And it is uncertain; some parts are harder than others, are they not?—Yes.

4741. Then when the collier, to whom you have referred, went home with only a pound for a fortnight, he had made a mistake as to the hardness of the coal, I suppose; he had been unlucky, in fact?—Yes.

4742. You are paid a little more or less, according to the hardness of the coal?—Yes; there is a little difference.

4743. And that collier may have got less wages because he had made a mistake as to the hardness of the coal?—Yes.

4744. Mr. *Greenall.*] Are your wages paid every fortnight?—Yes.

4745. Do you remember how much you have drawn in a fortnight?—For myself I am not working in a stall, but in a heading.

4746. What have you drawn?—I have managed to get 4 *l.* in the fortnight.

4747. *Chairman.*] You consider yourself a first-class workman?—I leave my work to answer that. I am not one that like to boast.

4748. But you work hard?—Yes, very hard indeed.

4749. Mr. *Greenall.*] Is that amount which you have mentioned the highest that you have ever drawn?—I believe I have drawn more than that, but the price of the heading is reduced in comparison with what it was when I first went down to try; it is reduced to 3 *s.* a yard upon the whole.

4750. What is the nature of the work?—It is driving a strait place about 7 or 8 feet wide.

4751. Mr. *Fawcett.*] Is the work which you call heading very much harder than the work which the stallmen have to do?—Yes, it is the hardest work that is done.

4752. Mr. *Hussey Vivian.*] Have you ever worked with chocks or cogs?—Yes, they are working in our pit now with what they call chocks, or pieces of wood built up.

4753. Do you prefer that to the old system of timbering?—No, I do not.

4754. *Chairman.*] Have you anything to say about the inspection of mines?—I think that the inspection of mines is not what it might be.

4755. Do you ever see the inspector down in your colliery?—No, I do not even know what colour he is, whether he is a black man or a white man, or what.

4756. Did you ever hear of his coming?—I have heard of his coming when there was an accident to a boy.

4757. What sort of an accident was that?—It was on the main level, on the bottom. One of the smallest of the boys follows the drift, and there is one, who is larger, who goes before. The little boy who follows the drift has a belt, and they commonly throw the belt over their heads, and let the chain hang down on one side. And it is thought that, in this case, he had come out after the loaded tub, and instead of hanging the chain up, the chain caught the wire up that was going down the other side, and it dragged him perhaps 100 yards, and killed him.

4758. Did the inspector come then?—I heard that he was there, but I never saw him; I inquired about that, and they said that it was not the mine inspector, but that it was an inspector over some machinery.

4759. Do you remember what the verdict was in that case?—I do not.

4760. As to the places of refuge in the mines with which you are acquainted, are they sufficiently provided?—Yes.

4761. You are not aware of people being crushed for the want of them?—No.

4762. At what distance are they placed?—We are driving one now; we drive one every 20 yards.

4763. That part of the law, then, is, as far as you know, properly attended to?—Yes.

4764. Mr. *Hussey Vivian.*] If you are satisfied with the ventilation and the general conduct of the mine, what good do you consider would arise from more frequent visits of the inspectors?—I think that the roof is not sufficiently attended to in our place; and, I think, that if the inspector was to come oftener, it would be the means of saving a deal of the roof falling down, which is liable to fall down. There are places which I have been into myself (I have been into almost every place there is in the mine that is working), which we call gate roads, and which are not fit for a dog, let alone a Christian, to go into.

4765. Those are the main travelling roads, are they?—Yes, those are the roads that the stallmen have to go on.

4766. *Chairman.*] You say that this colliery extends as much as two miles; do you mean that any one point is two miles distant from the foot of the shaft?—It is nearly that distance from the shaft.

4767. How many shafts are there?—We can go down four, taking them altogether. There are three shafts, and there is a partition in one, the one that we work at.

4768. They have made one into two?—Yes, it answers the same purpose as two; that is the shaft by which the stuff is now drawn up.

4769. But all these four shafts, counting the double one as two, are near to one another, I suppose?—Yes.

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4770. And the further end of the mine is nearly two miles away?—Yes, I should think it is upwards of two miles.

4771. I believe you have no complaint to make of the ventilation?—No, it is very good as regards the ventilation.

4772. Have you the system of weighing or measuring there? — Weighing or lotting; the master gives the men just about what he likes.

4773. Are the men satisfied with the way in which the weighing is done?—No, they are not.

4774. Are they generally dissatisfied with it?—Yes.

4775. Have they appointed a check-weighman?—Yes, we have a check-weighman.

4776. Does the check-weighman often differ in opinion from the head banksman?—Not as regards the weight which is allotted to the men.

4777. What are the points of difference between your check-weighman and the head banksman?—The stallmen have to get 27 cwt. to the ton, and then the master reckons to take all drafts; supposing a waggon comes, weighing 8¾ cwt., it is put down as 8 cwt. for the man, and the same thing is done throughout; then there is half a cwt. taken off the weight of every waggon for the garland, which is a ring, or a square piece on the top of the waggon; it is a loose piece, which can be put on the waggon.

4778. What is this garland?—It is a square piece of wood, perhaps the breadth of this table.

4779. Which is put into the waggon?—It is put on the top, so that the waggon shall hold more coal; when the waggon is full up to the sides, then this garland is placed on it.

4780. To raise the edges of the waggon?—Yes.

4781. They do not allow you anything for that, as I understand you?—There is half a cwt. taken off every waggon for each of these garlands, and, on an average, there is not above one garland for every seven waggons.

4782. After you have filled the regular waggon, you then have to raise the rim by the garlands?—Yes, if you think proper, and if you have garlands to do so.

4783. Are you not allowed for anything you put after you have filled the regular waggon?—It does not matter how heavy the waggon is; there is half a cwt. taken off every waggon.

4784. Mr. *Hussey Vivian.*] You mean that it is assumed that whether there is a garland or not upon the tub, the weight of the garland is to be deducted from the tub?—Yes, and there is about one garland for every seven waggons.

4785. And the weight of the garland is deducted from all the seven waggons?—Yes.

4786. *Chairman.*] Besides the draft that is allowed?—Yes.

4787. You do not complain of the weighing being unfairly done?—They sadly complain as to that; they do not think that the machine is just.

4788. I understand you to say that there have been no great differences of opinion between the check-weighman and the head banksman?—There have been some great difference.

4789. Differences of opinion upon what points?—The difference is that the check-weighman takes the whole of the account. Then there are what we call the colliers' coals, for which they take so many cwt. off again on your check. Suppose the check-weighman gives you a check of 100 tons, that will be reduced, and perhaps there will be five or six tons taken off, and you will have 93 or 94 tons allowed to you, instead of 100.

4790. That may be the case as a matter of rule or arrangement, but do you mean to say that there are often differences of opinion as to the actual weight of the coal in a waggon; that, for instance, where your check-weighman says there are 8 cwt., the head banksman says there are only 7 cwt.?—No, I do not hear any complaints of that description.

4791. The weighing itself, so far as it turns upon the actual weight, is fairly done?—Yes, in that respect.

4792. Still, it would be more satisfactory to you to have the weighing-machine inspected?—Yes.

4793. But you have no reason to suspect that the weighing-machine is not a fair weighing-machine?—No, I do not know that we have.

4794. What you complain of is the various pretexts, or various reasons for which drawbacks are taken?—Yes, the general opinion in the minds of the men is, that they ought to get a ton for a ton.

4795. That is to say, to be paid according to the weight, whatever it is?—Yes.

4796. Is there much dirt in these mines?—There is not much dirt amongst the coal generally.

4797. But supposing that there is a good deal of dirt mixed with the coal, how do you propose dealing with that?—The waggon is generally swept off altogether, and put aside.

4798. Have you had complaints of that being done unfairly?—Yes.

4799. That is not the business of the check-weighman, is it?—No, he does not interfere with that.

4800. He is not allowed to interfere with any waggon being forfeited for dirt?—No, that is for the head banksman; if he thinks it is not right he will take it off.

4801. Does the head banksman call the attention of the weighman to it, and say, "That waggon must be taken off"?—Not that I have heard of.

4802. He takes it upon his own judgment?—Yes.

4803. What alteration have you to suggest in the law, as to the weighing?—I would suggest that we should get a ton for a ton, and that we should have the drafts. If a waggon comes to 8¾ cwt., I would say that it should be put down at 8¾ cwt.

4804. Looking rather at those things which are matters for legislation, would you suggest that the weights should be placed under the inspection of the regular inspectors of weights and measures?—I would.

4805. Mr. *Foster.*] I suppose there is an understanding, according to the price per ton paid, that 27 cwt. shall be given by the workmen for the ton?—I do not know whether that is in the contract or not, but that is what is reckoned for the men to get.

4806. Is there any contract at all?—I cannot say.

4807. Is it not a custom and an understanding which stands in the place of a contract?—I think it is.

4808. Would you expect to be paid the same sum that you now get, by this understanding, for the 27 cwt. if you only gave 20 cwt.?—Yes.

4809. In

4809. In other words, you would expect an Act of Parliament to be passed to give you an advance of something like 25 per cent. upon your present earnings?—I do not understand it in that way.

4810. Your contract is to give 27 cwt. for a certain amount of money?—Yes.

4811. Would you have the Legislature interfere, and say that you shall only give 20 cwt. for the same amount of money?—I do not wish to interfere with the 27 cwt. to the ton, but it is the other question of the drafts that I speak.

4812. When you said that you would rather be paid a ton for a ton, what did you mean?—A ton is a ton, of course; 20 cwt. is a ton.

4813. Then you said that you did not object to the 27 cwt.?—That lies with the men, the masters reckon them to get that; but upon the whole calculation they get nearly 33 or 34 cwt., when the draft and everything is taken into account.

4814. Are you subject to the odd weights taken for each draft?—Yes.

4815. You say that the general understanding is that you give 27 cwt. What is the understanding with respect to the draft between the men and the employers?—The master takes all drafts of ¾ of a cwt. or ½ cwt.

4816. Is it an understanding that the men are not to be paid for odd quarters?—They are not paid for them.

4817. Is there an understanding between the masters and the men with respect to that?—I am not able to say that; I do not think there is any understanding between the men and the masters with reference to that. The masters merely take it.

4818. You mentioned that there was an understanding with regard to the 27 cwt. for the 20 cwt.; I only want to know whether there is any understanding with reference to the draft?—I think not.

4819. Supposing a tub, or a waggon weighs over 8 cwt. and less than 9 cwt., is there an understanding that it should by called 8 cwt.?—I do not think there is any such understanding, the master merely does it of his own will.

4820. Mr. *Clive.*] How long have you worked in this pit?—Between 13 and 14 months.

4821. Where were you last before that?—At Hucknall.

4822. How far is that from this pit?—Three miles.

4823. Before you took to working in this pit, did you know about the draft system at this pit?—No.

4824. When did you first become aware of it?—By what I have heard the men say.

4825. Has it ever happened to yourself?—Yes.

4826. When was that; how long after you got into the pit?—When I first went into that pit we had the stuff sent out of the heading, just the same as they had out of the stall, and I had to experience it the same as the rest.

4827. Was it so in the pit where you were before; in the one three miles off, I mean?—I forget whether it was or not.

4828. How long were you in that pit?—Perhaps four or five months.

4829. And before that where were you?—In Leicestershire.

4830. How long were you there?—That is where I belong.

4831. How long were you working in the pit?—From 13 to 14 or 15 years.

4832. What is the custom there as to this draft?—They allow them half hundreds there.

4833. And you wish for the same thing now, do you?—Yes.

4834. You would be satisfied where you now are, if you could introduce the Leicestershire system?—If we send a waggon 8¾ cwt. we want to be paid for 8¾ cwt.

4835. As you were in Leicestershire, is that what you mean?—I think that if it was above 8½ cwt., it was put down as 9 cwt., and if it was under, it was put down as 8 cwt. The master and the men gave and took in that respect.

4836. And if you could get your Leicestershire arrangement where you now are, you would be satisfied?—I think it best to be paid by the weight.

4837. But you would be satisfied if you could have the Leicestershire system where you are now?—Yes.

4838. Your check weighman is the servant of the men, is he not?—Yes.

4839. Does he ever report to the men when he differs from the master's man?—Yes, occasionally.

4840. Does he report in writing or not?—I do not know.

4841. You never heard of his doing so?—No.

4842. Does he ever report by word of mouth?—I suppose he does.

4843. Have you ever heard of that?—I have heard him talking to the men as to what their stuff has been, and when they have gone for the amount which he has told them, they have been six or seven tons short in the office.

4844. What is your check weighman's name?—William Bolstead.

4845. Has he been examined here?—No.

4846. Is he in London?—No.

4847. Sir *Philip Egerton.*] How many waggon loads does it take to make a ton in your colliery?—It is according to the size.

4848. What is the average number to a ton?—Perhaps three.

4849. The waggons are weighed separately, are they not?—Yes.

4850. And the draft is taken off each waggon?—Yes.

4851. Then, in the case of a ton composed of three waggons, you complain that there might be nearly 3 cwt. of coal deducted on the ton?—Yes.

4852. If the draft were taken upon the ton instead of being taken upon the waggon, you would not object to that, I presume, because it might be only ¾ of a cwt. over the ton instead of ¾ of a cwt. over each waggon?—It would be better, certainly.

4853. Mr. *Vivian.*] You were satisfied with the Leicestershire system, you say; may I ask why you left Leicestershire and went to this district, where you are not satisfied with the system which is adopted?—Because the stall that I worked in in Leicestershire was very bad; and the same week that I left there and went into Nottinghamshire, the man that I had worked with got killed.

4854. Were there no other mines in the neighbourhood, or no other stalls in that pit which you could have had?—They will not allow you to shift to another stall.

4855. Were there no other mines in the district?—Of course there were.

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4856. Still you went to this district where the bad system of weighing was in vogue?—I did not know about it till I came there.

4857. But it was open to you to go back?—Yes, of course it was; but still, I have said that the work that I am doing is not stall work.

4858 Where would you propose to draw the line in reference to drafts; would you weigh coal to pounds?—Yes.

4859. Would it be possible to weigh every tub to a pound?—I think it would if the machine was adjusted to that.

4860. How much is the mine raising that you are now working at; how many tubs are drawn in the 12 hours?—I cannot say.

4861. How many tons of coal are raised in a day?—Between 100 and 200, or perhaps upwards of 200 altogether.

4862. In the 12 hours?—Yes.

4863. Then there would be something like 600 tubs, would there not?—There might be more. I have not taken any notice of that.

4864. If there are three tubs to the ton there must be 600 tubs, must there not?—As regards the quantity drawn, I am not prepared to say what quantity of stuff is drawn in 12 hours every day.

4865. You imagine that it is something like that number?—It may be more and it may be less.

4866. We will suppose that it is something like 200 tons, which no doubt is a small quantity for a first-class pit to raise. There would consequently be 600 tubs raised in the 12 hours, would there not?—Yes.

4867. Then there would be 50 tubs in the hour?—Yes.

4868. That is about one a minute?—Yes.

4869. Do you think that it would be possible to weigh each tub to the pound?—They have plenty of time to weigh them as regards the time.

4870. Do not the tubs vary very much in weight themselves?—Some are heavier and some are lighter, of course. There is a difference in the tubs; there are large tubs and there are small ones, and there is just the same taken for a garland on the small tub as there is on the large one.

4871. I am talking of the draft, not of the garland; you think it would be possible to weigh each tub to the pound, do you?—Yes, if the machine were adjusted to that.

4872. Are you aware how coal is sold; whether it is sold by the pound?—No, I am not.

4873. Are you aware whether it is not the custom of the trade to give some turn of the scale to the purchaser?—No, I am not.

4874. As to dirt, I presume that the tub is tipped on a screen, is it not, after it has been weighed?—They hand it out into the waggons.

4875. Supposing any dirt is found in a tub, what happens?—If there is much, it has to go off altogether.

4876. But supposing that after it has been weighed and put to the man's account, dirt is found in it?—Then it is taken off.

4877. After it has been weighed?—Yes.

4878. Not as soon as it comes up the pit?—It is not exactly as soon as it comes up; it is not till it gets a certain distance to the waggons.

4879. If much dirt is found to exist it is then taken off?—Yes.

4880. I suppose that some dirt exists in every waggon, almost?—It is not a great quantity of dirt that falls into the coals in our place.

4881. But taking the whole of England through, some dirt comes up in almost every waggon, does there not?—It is impossible to fill them without small slack getting into them sometimes.

4882. Then the master cannot sell that as coal?—He can sell it as slack, he cannot sell it as coal, but it is possible to pick the coal out from the slack.

4883. Then he has to select that tub and put it on one side; he cannot sell the dirt as coal?—He cannot sell that dirt as coal.

4884. Is it just that he should pay the man for every pound contained in the tub, although some of that would have to be taken out as slack and not sold as coal?—There is so much deducted (I think half a cwt.) from every tub for the slack.

4885. That you do not object to?—No, I do not object to that.

4886. Slack, I presume, is small coal, is it not? Yes, it is very small.

4887. It is not dirt?—No.

4888. My questions went not to small coal, but to dirt?—There is none scarcely that goes into the coal except it falls in the main road.

4889. That is in your pit?—Yes, in our pit.

4890. But in many pits there is a good deal, is there not?—There may be for aught I know.

4891. In your experience you have known cases, have you not, in which it was very difficult to separate the coal from the slate which has fallen into it?—I have, in Staffordshire, but it was stint work, and therefore the men had nothing to do with it.

4892. But legislation must be applied to all England, it cannot be applied to one particular pit. The question is what is just for all, is it not?—Yes.

4893. Where it is very difficult to separate dirt from coal, and the master has to separate it subsequently, would you consider it just that the tubs should be weighed accurately to the pound and paid for as coal?—I do not think that the men would have any objection where it would be impossible to keep the dirt out, to a little allowance being made.

4894. *Chairman.*] You say that half a cwt. is allowed for slack, besides the allowance made for the weight of the garland?—Yes, I think there is.

4895. Your complaint as to the garland is that you are sometimes charged for the weight of a garland, although you are not able to get one, is that so?—Yes, we are charged with it, though we have not above one for every seven waggons.

4896. Supposing that a committee of workmen met a committee of the masters, and said, "We think it more convenient that instead of having to find 27 cwt. for each ton, we should only find 20 cwt., and that you should not have the benefit of the odd pounds between one cwt. and another," do you suppose that that change could be made without any diminution of wages?—Well, I do not know.

4897. Did you think of proposing to the masters, that where you now find 27 cwt., you should only find 20 cwt., or that instead of their being allowed to claim the odd pounds and quarters, you should be paid for them?—That is for the men and the masters to arrange.

4898. You propose that, as a more convenient system

system for coming to an understanding, and as a better basis for agreement, rather than as a mode of altering the rate of payment; you do not mean that you should be paid as much for 20 cwt. as you are now paid for 27 cwt., do you?—I do not suppose that we should.

4899. Only you think that instead of having a conjectural mode of estimating your wages, you should have it done according to the real weight?—Yes.

4900. Mr. *Liddell.*] You say that the tub weighs upon an average about 8 cwt.; that is about the weight, is it not?—They may weigh more.

4901. It goes about three tubs to the ton you say?—Yes.

4902. That would be on an average something under 7 cwt. to the tub?—Yes, it would.

4903. Supposing that the tub weighs over the 8 cwt., the master gets the benefit?—Yes.

4904. But supposing that it weighs a little short of 7 cwt., do you get paid for 7 cwt.?—No.

4905. Then there is no give and take system?—It is obliged to reach 7 cwt. before we are paid for 7 cwt.

4906. Then the advantage is all one side?—Yes. If it is a little short of 8 cwt., it is put down 7 cwt.

4907. If it is short of 7 cwt., you do not get paid for 7 cwt.?—If it is short of 7 cwt. we get paid for 6 cwt.

4908. *Chairman.*] Supposing it is only half full, do you get paid at all; supposing you sent up a tub with only 4 cwt. in it, would you get paid for it?—If it reached 4 cwt. we should get paid for it.

4909. It would not be forfeited for short weight?—No.

4910. The master in that case would tell the workmen to be more careful, I suppose?—Yes.

4911. And that he would send him away if he did not attend to that caution?—Yes.

4912. Mr. *Liddell.*] Have you had any remonstrances with the master on this subject?—Yes, the men have been to him with regard to the draft taken off the coal, and also to a manager who is under the same master, though at another pit now.

4913. Have you ever struck on account of that?—No.

4914. Sir *Philip Egerton.*] With reference to the deduction for the collier's coals, is so much coal allowed to each collier?—Yes, we have so much coal allowed; 12 cwt. a month I believe it is. I think a ton was taken off one fortnight from one of the stallmen, and the man thought it rather too hard, and went to the manager about it, and the manager said that if he was not satisfied with it, they would take more off him another time.

4915. Do I rightly understand you to say, that the masters take more off than the value of the coals that they supply to the men?—Yes, it is supposed that they do; at least the men think that. They take off a great deal more than is sent to the men.

4916. *Chairman.*] Have you anything to say about the club system in your place?—I think it would be better if the men had their club money themselves, instead of having it stopped in the office.

4917. It is done now by keeping it back from the men, is it?—Yes, they are stopped.

4918. By whom is it managed?—It is managed by the agent.

4919. Is any account given to the men?—Not the least; not in our place.

4920. Are there any fines in the places with which you are acquainted under the contract rules?—Yes; there are fines in our rules, I believe.

4921. It would be more satisfactory to the workmen, I understand you to say, to have clubs of their own?—Yes, a deal more satisfactory.

4922. Or to have a share in the management of the present clubs?—Yes.

4923. Is there any other point that you would wish to say anything to the Committee about?—I do not think there is.

4924. Mr. *Greenall.*] Is it a rule commonly where you work, that you shall join the club; are you required to join it, or is it optional?—I think we are compelled to join it.

4925. You say you think so; but are you sure?—Yes.

4926. Mr. *Liddell.*] You are paid fortnightly, I think?—Yes.

4927. Is there any wish expressed on the part of the workmen, to be paid their wages weekly?—Yes, it is desired very much by all the men.

4928. Have you represented that to the master?—Yes; the men have been to the master three or four times, and he does not seem willing to pay them every week, but he allows the stallmen so much.

4929. You mean that he gives them so much on account?—Yes.

4940. Is that a system which is generally practised?—He has done it just lately, because the men went to him several times about it. They wanted the money every week; they thought it would be better for him and for them too, because the men who are paid every fortnight, when they are paid, just lie idle a day or two, which I think they would not do, if they were paid every week.

Mr. Andrew Hall, called in; and Examined.

4931. *Chairman.*] Where do you come from?—Snibston, in Leicestershire.

4932. What are you?—A working miner.

4933. How long have you been a working miner?—From 21 to 22 years.

4934. Where have you worked?—I have worked in Leicestershire all my life nearly.

4935. How many years have you been working in the colliery where you at present are?—I have worked about 18 years in Leicestershire.

4936. In what colliery?—Whitwick Colliery and Culloden Colliery, and Snibston Colliery.

4937. Where are you working now?—I do not work anywhere at the present time.

4938. How long have you ceased to work?—About five weeks.

4939. Where did you work last?—The last colliery that I worked at was Cinder Hill.

4940. Cinder Hill is in Nottinghamshire, is it not?—Yes.

4941. But you have mostly worked in Leicestershire?—I came from Leicestershire, and I joined a union, and they victimised me for that, and

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and that is the reason why I am not at work at present.

4942. What district are you prepared to speak about?—I would speak of collieries in Leicestershire.

4943. What would you call the district?—I do not know that there is any particular name to the district.

4944. Are there many boys employed in that district with which you are acquainted?—A great many.

4945. What do you mean by boys; up to what age do you apply that term to them?—I reckon them boys when they are 12 years old.

4946. Confining yourself to boys under 14, are there many boys under 14 employed in that district?—Yes, a great many.

4947. What proportion of boys should you say there are under the age of 14 to 100 men in that district?—I should say that there is one boy on an average to two men.

4948. That is to say, speaking of boys under 14?—Yes.

4949. Are there any boys under 12 in that district employed in the mines?—Not that I know of; it is not allowed now.

4950. Were there any under 12 employed before the Act of 1860?—Yes; I went to work at eight years of age myself.

4951. There has been an improvement in that district since the Act of 1860 then?—Yes.

4952. As to the hours of working of the boys, how long do they work?—I should say that they are away from their homes from 15 to 16 hours per day.

4953. That is supposing their homes to be some way off, I presume?—Many of them live some distance away in the proprietors' houses, which have been built purposely for the men.

4954. Do many of the boys live two or three miles off?—Yes, there are some that live nearly four miles off.

4955. How many hours are the boys in the pit?—They will be in the pit 13 or 14 hours, and I will give the reason for that. At Snibston, boys have not to shove the waggons; they have small ponies, and they have so much per score of waggons for fetching the coal, and the boys try which can earn the most, and that causes them to stay longer in the pit than they would otherwise.

4956. The boys are paid by the piece, in fact?—Yes; they used to shove the waggons, but they thought it best to have ponies; one boy will perhaps have to fetch as much as two places will provide; he has all the waggons to fetch for those places perhaps, and if one of the waggons gets out of the way the other boys will not give them a lift, because they go against one another, and try which can get the most in the day. Unless the boys were particular friends one would not help another when he needed it.

4957. Do you mean to say that if the tub gets off the rail a boy is able to lift it on again?—Yes, they do it in about seven or eight collieries; and they have most of them a small belt, which they carry round them to put on the pony's head when he has to pull a waggon. If they can get his back against the front end, even if it is ever so bad, the pony will draw the waggon out, because they use the ponies till they know their duty almost as well as the boys do themselves. —*(The Witness described the position in which a boy would stand in order to lift a waggon on to the rail.)*

4958. It is the pony that lifts the waggon, and not the boy in reality, is it not?—The pony cannot at the other end.

4959. Does the boy use a lever to do that?—He has a small belt on purpose; he would hang the belt round the pony's neck; the pony would carry it for convenience for him, and when the waggon got off the rail it would be in readiness for him.

4960. Where does he put the belt on?—He puts it on round his hips.

4961. He helps the pony to pull, is that what you mean?—No, he does not help the pony to pull.

4962. Have you ever known boys strained or hurt by doing that work which you have just been describing?—I do not know that I have; I have known several to be lamed and several to be killed, when they have been at the front end, if they have had a random pony that has not been in the pit more than a few days.

4963. But you have not known boys strained or hurt by their work?—Not that I know of.

4964. As I understand you, they work as long as they do, because they work by the piece, and because they work one against the other?—Yes.

4965. Most of these boys have fathers in the collieries, I suppose?—Yes.

4966. And these are the boys who are paid by the masters of the mine?—Yes.

4967. Sometimes you say they stay as long as 13 hours in the mine?—Yes, more than that; we will say that that is the average.

4968. Are they liable to accidents?—Yes.

4969. Are there many accidents among the boys?—Yes.

4970. From the pony becoming at times unmanageable, and drawing the tubs over them?—Yes.

4971. Are there any women employed there?—No, there never have been any in my remembrance in Leicestershire.

4972. Have the boys been usually well taught up to the age of 12?—In our locality most of the boys under 12, I believe, have to go to the brick yard, and to work on the pit's bank; they will take them on the pit's bank at nearly any age, and then when they come to be 12 years old, they will take them down.

4973. So that they do not go much to school before they are 12 years old?—No.

4974. What do they do on the pit's bank?—When the trucks get nearly full the boys place cobbles round the trucks, and they screen the slacks, and do several things of that kind; they run the empty trucks round.

4975. Is that work that they have to do on the pit's bank heavy work?—It is hard enough.

4976. So that they do not go much to school before they are 12 years old, and not at all after that age?—That is so.

4977. Mr. *Liddell.*] You stated just now that you have been working latterly in a colliery in Nottinghamshire?—Yes, I worked for I think about five weeks there.

4978. But you joined a union, and you were victimised, you said, in consequence?—Yes.

4979. Did the managers of that colliery object to employ any man who was a member of a union?—They only objected to me. The men made me president of the union. They went to the

the manager about having the money paid to us every week. There was a deputation appointed for that purpose, and there were six of the men who were on it. They went twice without me, but the manager kept putting them off, and telling them that he would see about it. Then the men moved that I should go with them; and then, the third time that we went, I said to the manager, "It is no use your saying that you will see us this day or the other day; you know the business that I have come about as well as I do. I want a positive answer this time, whether you will give us our money weekly instead of fortnightly; and," I said, "in fact, if the men are in my mind about it, I can only say that I will not do any more work till I have got this week's pay" (there was a week's pay then due to me). "Then," he said, "why will you not work without that?" I said "Our neighbours' collieries round have the wages paid every week, and they have it at 12 o'clock too on the Friday." And therefore I urged it on our manager. Not only that; but when we had to wait a fortnight for our wages, Messrs. Barbers and Walkers' men have gone by us, every Saturday, having already been paid their wages; and it has been very often seven o'clock at night on Saturday before we could get our money.

4980. Do I rightly understand you, that you were discharged from that colliery for going about the business of the union, and leaving your own work at the colliery, in order to attend to the business of the union, in your character as deputy?—After the last time that I went (it was either the second or third day), the manager said to my mate "You must get your things out of the stall"; and I did not know the reason, and I went to him, and he stopped me and another man (there were three of us altogether), and for the other who had not joined the union, he found out a place at Cinder Hill. In fact, he went on to that place at dinner time; but he could not find any places for us other men who had joined the union; and that showed clearly that it was for spite.

4981. I want an answer just to this simple question; had you left your work in the pit in order to go about the work of the union?—I was working at night in the pit, and I did not lose any time about this matter; or what I lost, I lost in my rest, seeing that I ought to have been in bed at the time. I did not lose any time from the pit about it, nor did any one else.

4982. Then you were dismissed because you were acting as president of the union?—Yes; I have been to the employer twice, and asked him for work, and he will not find me any.

4983. The question that you were endeavouring to settle on behalf of the workmen was the question of payment by the week instead of payment by the fortnight?—Yes; and he agreed to give it us, and put it down that he would do so; but when the men went, he paid them perhaps within a pound, some 30 *s.*, and some 50 *s.*

4984. He paid them money on account, you mean?—Yes.

4985. Mr. *Foster.*] Was that satisfactory to the men?—No; he had promised to pay us our money every week.

4986. They would not be satisfied with a draw?—They were not satisfied with that.

4987. Had you been having a draw weekly before?—No.

4988. Are you aware that it is a very serious business to make up weekly the pay of a colliery?—There is the Kiniley colliery, which belongs to the same proprietor, they pay there one week, and at Cinder Hill and Whitwick the other week. That was where the difficulty arose. They do pay every week, but they do not pay all the men every week; it is one colliery one week, and the other colliery the other week. Mr. Ellis and Mr. Waswick, and Messrs. Barber and Walker pay their men every week, and more than that, they pay them at 12 o'clock on the Friday.

4989. And you want to be put on the same terms, I suppose?—We told him that we should be willing to be paid on the Saturday, we would not trouble him to pay on the Friday. It was almost always dark at night before we could have the money, even after we had waited a fortnight for it.

4990. Have you worked in any other district excepting this district of Nottinghamshire?—Yes, I have worked in Yorkshire, Staffordshire, and Derbyshire.

4991. How long have you worked in Leicestershire?—Eighteen years; I should say when I have been away, I have not been away for many months together.

4992. You have chiefly worked in Leicestershire then?—Yes, under Mr. Waswick nearly all my life.

4993. Mr. *Clive.*] What is your great objection to fortnightly payment?—I think it would be far better, and indeed I am sure it would, if we had our money every week.

4994. On what ground do you think it would be better?—It would do us more good for our wives and children.

4995. Do you mean that you would not then have to get long credit at the shops?—Yes; where a man is short of money he is obliged to go to the small shops, and he cannot buy to the best advantage; whenever you have trust they will make you pay more.

4996. Even for a week's trust?—Yes. If a man does not receive his wages every week, if he only gets a small sum of money for his wages, it compels him to go on trust for the last week.

4997. Are you quite sure that shops do make a difference in their prices for a week's trust?—Yes, I am sure they do; you always have to pay more at the small shops than at the large ones.

4998. If those who keep a small shop are certain of payment at the end of a fortnight, what difference do they make in the charge when they give a week's trust?—They make you pay more money than if you gave ready money.

4999. You have spoken of accidents to the boys, is your objection to the employment of boys grounded on the youth of the boys, or on the length of time that they are in the mines?—I would say that they should not go to work till they are 12 years of age, and I think that 8 hours' work is plenty long enough for either man or boy.

5000. But after 12 years of age, with 8 hours' work, you think that the boys might go into the mine?—Yes.

5001. And you would not care about the accidents then?—Yes, I should care about them.

5002. What work would they do then; you know accidents may happen in 8 hours as well as in 12 hours?—If the boys from 14 to 16 were employed in doing the work that I have referred to, I think they could do it properly; it is when they have ponies that are strange to the boys, and

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boys strange to the ponies, that the accidents are caused.

5003. Would you say that no boy should go down the mine before he was 14, or at what age would you say he might go down the mine?—I should say that he might go down at 12, because there are other things he might do; he might hang on to a place, and help in lifting, and such things as that.

5004. You think that no boy under 14 years of age should be put to work at pony driving?—From 14 to 16 they might.

5005. You say that eight hours' work is sufficient for men or boys?—Yes.

5006. Do you work more than eight hours now?—I have worked 18 and 20 hours; they are acting on the same thing now.

5007. That was your own doing, was it not?—Of course if we did not do it we should not have any thing when the reckoning came

5008. What could you earn in eight hours at the present rate of payment at the last colliery where you were employed?—When I reckoned it up at the fortnight, and when I had paid for my candles, and all the expenses, it made 2 *s.* 8 *d.* a day, and I think that I am worth double that.

5009. That is what you could earn in eight hours, is it?—I would earn more if they would let me have it, but that is all I had.

5010. What did you earn in the last month that you worked there?—I only worked two days and part of another.

5011. What did you earn then?—When I had paid my expenses it came out 2 *s.* 8 *d.* a day.

5012. How many hours was that?—We only worked eight hours; it was a deep pit; they had to change the rope at a certain time, and if the men were not ready when they changed the rope at that time, then they had to wait till the next turn. If you were not out at dinner time then you would have to wait six hours; you would have to wait till the evening; that forced the men to stop at eight hours; and I have said, many a time, that I wished it was the case always.

5013. How many days in the week did you work?—I always kept at work every day when I was able to do so.

5014. Did the pit work every day in the week?—It did whilst I was there.

5015. And you did also, as I understand you?—Yes.

5016. *Chairman.*] You say, as I understand you, that unless the miners came to the bottom of the pit at a particular time, they might have to stay six hours doing nothing; but why might they not go back to their work, and wait till the next turn came?—We used to go down about two or three o'clock in the morning, and then we had time to get up while they were standing for dinner; they would change the rope on purpose to get the men out of the pit. If the men had not got a watch so as to know the time just to a minute or two, and if they were not there at the time, then they would have to wait till the next lot of men came up.

5017. What was there to prevent their working at that time?—They could if they liked, but if a man had been out of his bed at one o'clock in the night he would not feel inclined to work till seven the next night.

5018. Do the boys sit down to dinner, or do they they eat their dinner when they are going on with their work?—I think they generally have to catch it as they can.

5019. They eat their dinner while they are driving their ponies?—They have to keep the regular quantities of waggons in the meeting-places where the horses meet on the main road, and when they stand for dinner, if the sidings are full of waggons they have time to get their dinner, but if they are not they have to get a sufficient quantity of waggons ready against the time when they start the train again.

5020. There is no regular stoppage for dinner?—No.

5021. Only a stoppage of the drawing?—Yes.

5022. How long does the drawing stop?—They stop an hour.

5023. Did you ever see an inspector down these mines?—I have worked at the pit 21 or 22 years, and I never saw one yet.

5024. General *Dunne.*] During the whole period have you never seen one?—I never saw one yet.

5025. *Chairman.*] You have heard of one coming, I suppose?—When there has been a man killed the inspectors will come to make it as smooth as they can.

5026. Have there been accidents there during your time?—Yes, several.

5027. When you say that the inspectors will come to make things "as smooth as they can," can you give any reason for that statement?—They make it known to the inspector that the thing has occurred, and he will make the best that he can out of it; but I never heard of his coming down to the pit to see the place; he has merely gone to attend the jury.

5028. When there has been an accident you mean that you have not heard of the inspector going to look at the place where the accident has happened, but merely to attend before the jury?—Yes, I do not believe that the inspectors visit the place where the accident has occurred in one case out of 20.

5029. What sort of accidents have there been in the pits with which you are acquainted?—Many from neglect of timber.

5030. I think you say that you have never known of an inspector coming down the pit?—No, there is one thing which I should like to say on the subject of inspection; when anybody gets killed, whether it is a man or a boy, they merely get certain tradespeople to sit on the jury who say this thing and the other thing; they may sometimes call one of the workmen like myself, but it is very rarely that they do. I do not think that is a right plan at all. I think that the jury should be composed partly of working colliers who know how a mine is carried on.

5031. The workmen, I suppose, are called as witnesses at inquests?—They never call any but those that they know will speak for the master.

5032. Have you known cases of accident in which the workman most competent to give a valuable opinion as to the facts of the case, has not been called?—Yes.

5033. And you think that he has not been called for fear he should give unfavourable evidence?—I know that men would have gone to give evidence, and would have liked to have gone, but they dared not go.

5034. Have you ever known the case of workmen going to the manager, and saying, that they were competent to speak to the cause of the accident, and that they wished to be called as witnesses, and yet they have not been called?—they

They durst not do that; if a workman were to go to the manager and say that, he would not have any more work.

5035. If he were to go to the manager and offer himself as a witness, he would be punished for leaving his work, is that what you think?—Yes.

5036. Have you ever known that done?—No, because I have never known any man to go and ask that.

5037. But the men do not go and offer themselves as witnesses, because they are afraid of getting into trouble if they do; that is what you say?—Yes; they have rules to say, that if we give any offence whatever, they can turn us away without any notice; but on the other hand, if we want to quit our employment, we have to give 14 days' notice; it is for that reason that a man does not speak in his own defence.

5038. If I understand you rightly, there is a dissatisfaction among the workmen, as to the way in which inquests are conducted?—Yes.

5039. Both as to the composition of the jury, and as to not summoning the workmen as witnesses?—Yes.

5040. Mr. *Liddell.*] Was there any rule of the union at that colliery in Nottinghamshire where you worked last, to the effect, that the men should not work more than eight hours a day?—I have never seen that rule in any set of rules at all, in my life, and I think I have either 10 or 12 different copies of rules from different mines; I have only now with me the Snibston book of rules, and it says, that if any man joins any union or association, or if he merely subscribes to one, let alone joining it, he is to be sent away at a moment's notice.

5041. I think you have hardly apprehended my question; I asked you whether it was a rule of the union, that men should not work more than eight hours a day?—I believe it is a general rule among ourselves; we think that eight hours' work is sufficient. Of course our association is grounded on the eight hours; we believe that it is long enough, and in fact, we do not intend to work any more in course of time, any of us; we have not yet told the masters that we will work no more than eight hours, but that is our intention.

5042. *Chairman.*] That is the object which you are striving after?—Yes.

5043. Mr. *Fawcett.*] Do the members of your association refuse to work at a mine if non-union men are employed?—Where the men are working eight hours, and all the men are joining the association, if a man goes and asks the manager for employment, the manager says, "Are you a union man?" and if the man says "No," then the manager says, "I dare not employ you; you must join the union before I can take you in;" and they allow a man to sit in the office to take our union money.

5044. But supposing that a manager were to introduce non-union men who were willing to work 12 hours a day, what would the union-men do; would they refuse to work?—Yes.

5045. Mr. *Liddell.*] When you bring about this change by which you will only work for eight hours, do you expect to obtain the same amount of wages as you now get for working 12 hours?—Yes, and more than they get at present at Cinder Hill.

5046. Mr. *Fawcett.*] On what ground do you think you will be able to get as much or more wages for eight hours' work than you do now for 12 hours' work?—It is because of the question of the weight, which my friend was speaking of, who was examined just now. There were many things which he did not tell the Committee about that, which I should be prepared to tell them if they wished me to do so.

5047. Do you think that you would be able, with eight hours' labour, to get out a greater weight of coal than you do now with 12 hours' labour?—If a man works eight hours, and works hard, he can get a sufficient day's wage. A man cannot work for 12 hours, and work hard all the time, because it is most fatiguing work, the man being stripped to his naked skin.

5048. But whether or not you get the same amount of coals out in eight hours in future as you do now in 12 hours, you think that you have a right to the same amount of wages as you get now; is that your view?—Yes.

5049. Mr. *Clive.*] Are these the rules (*handing a copy of rules to the witness*) in use at the colliery of which you have spoken?—Yes.

5050. Will you read Rule 13?—"That if any man or boy engaged to work at these collieries shall be a member of the union or association called 'a Miners' Union or Association,' or contribute thereto, not being a member, he or they shall be subject and liable to instant dismissal from his or their employment at these collieries."

5051. You went down a pit when you were eight years old, you have said, have you not?—I went on the bank when I was hardly eight years old.

5052. How old were you when you first went at all?—I was not eight years old.

5053. Did you work above bank, or below, when you first went?—On the bank.

5054. How long were you on the bank?—About 18 months.

5055. And then you went down below?—Yes.

5056. How many hours a day did you work at that time?—I reckoned to work 12 hours; from six to six.

5057. At that time you worked that length of time; is that so?—Yes.

5058. Where did you get your education?—Perhaps you would not like the phrase which I should use, but I got my education when I became converted; I began then to study, and to learn to read and write.

5059. You were never at school at all?—No, I was never at any school.

5060. Do you know who the Inspector of your district is?—No, I never heard who he is.

5061. And is it your belief that he does not go down the collieries at all?—I believe that in 19 cases out of 20 he does not.

5062. You think that he does not visit the collieries at all, in fact?—I think he does not.

5063. You never heard his name, you say?—No.

5064. And you never saw him?—No.

5065. You never asked after him, perhaps?—No.

5066. You have never heard whether he himself says that he does go down the collieries?—No.

5067. *Chairman.*] When you say that you would expect to get the same wages for eight hours' work as you now get for 12 hours' work, do you mean, first, that you would work harder during the eight hours than you now do on the average in the 12 hours, and were you also thinking of other arrangements with respect to the

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the weighing, which would increase the rate of your pay?—I should say that I should not work so hard then. I should work less hours and have more money.

5068. But during the hours when you were working you would be working harder than now, would you not?—No.

5069. You would not be working on an average harder for the eight hours than you do now for the 12 hours?—I would not work so hard as I have done.

5070. Is it weighing or measuring that is adopted in the collieries which you are acquainted with?—It is weighing.

5071. Are you satisfied with the manner in which the weighing is carried on?—No.

5072. What complaint have you to make as to the mode in which the weighing is carried on?—If my memory serves me right, 112 lbs. is a hundredweight, but they compel us to get 120 lbs. for the hundredweight.

5073. But that is a mere matter of arrangement between you and the master, I presume? No, it is not an arrangement at all; it is against the mens' will.

5074. But before you have been a week at the mine you know that you are only allowed 112 lbs. for 120 lbs.?—You know when you get your check, not till then.

5075. The first pay-day you would know very well, would you not, that you were only allowed 112 lbs. for 120 lbs.?—I never knew it till a good while after; I did not know it till our check machine-man told us.

5076. If you did not know it, other people knew it, probably; but as to the weighing itself, is the weighing fairly done?—Yes, I believe it is fairly done.

5077. Only you do not like the system of being paid for less than you actually do send up?—That is it; in Leicestershire they do not get 27 cwt.; the agreement is to get 24 cwt. to the ton.

5078. You say that is the agreement; that is understood, is it?—Yes.

5079. Have you a check weighman there?—No; there is not any check weighman allowed in Leicestershire.

5080. Can you give me any instance in which the workmen have applied to the master to appoint a check weighman when he has refused to do so?—I was over there three weeks since with a friend of mine, and they pressed on him to go to the miners, and he had two brothers who were well acquainted with the thing (indeed, one of his brothers is the manager), and they told him that if he went in to act as a weighman for the men he would be spited in other ways.

5081. Then you do not mean, if I rightly understand you, that the masters have actually refused to appoint a check weighman; only that people shrink from taking the office, and they are afraid of taking it for fear of getting spited?—The masters know that they cannot hinder the men from having a check weighman; but they do all they can to frighten the men, and in that way they manage to keep them out.

5082. And, as a matter of fact, in the collieries which you know in Leicestershire, is there a check weighman employed?—Under Mr. Waswick there has been one for the last eight years, and that is the only one.

5083. Is there only one colliery in the district where there is a check weighman?—Only one; and that is the Culloden Colliery, under Mr. Waswick.

5084. And in the other collieries the workmen cannot get a fellow-workman to serve in that office for fear of being spited, as you say?—They cannot.

5085. Mr. *Liddell.*] Do I rightly understand that the masters in Leicestershire positively object to the employment by the workmen of a check weighman on the bank?—Yes; they do not say that the men cannot have a man there, because they know that they can; but they keep telling them that they shall not have one, and that if they do they will spite them in other ways; and therefore they do not make the effort to put a man on the bank as their check weighman.

5086. Mr. *Foster.*] Has there ever been a strike on that question?—No.

5087. Mr. *Vivian.*] You desire strongly to have a check weighman, do you?—Yes.

5088. And your difficulty is, that the men are afraid of acting as check weighmen?—Yes.

5089. And none of the miners in your colliery are sufficiently brave to face the master, and to act as check weighmen for the men?—No.

5090. How many are employed in that colliery?—There are two collieries in that direction, Snibston and Whitwick; many thousands are employed there.

5091. Is there a great demand for labour in that district, or have colliers a difficulty in finding employment?—They get work pretty well in the winter time; but now, when it is getting towards the summer time, they are working very bad; in that part they are very slack, not working more than three days a week.

5092. Mr. *Liddell.*] The check weighman is paid by the men, of course?—Yes.

5093. How much is he paid?—The men reckon to give him about 2*s.* a stall; and then, if that will not make his wage up to a 1*l.*, or 21*s.*, or something like that, they will subscribe a little more to it.

5094. Then a man cannot get so good wages if he is a check-weighman as he can get if he is a miner?—Not on the average; they generally try to get one that is a cripple for that office. The man at Culloden was a cripple; and then there is Mr. Bolstead, at Cinder Hill, he got a leg broken, and they only gave him about 10*d.* a day: so the men took him for their check-weighman, and put him to a machine. We feel it our duty to do what we can in that way for the cripples.

5095. *Chairman.*] Those men have become cripples, I suppose, from accidents in the collieries?—Yes.

5096. How do accidents chiefly happen in the collieries which you are acquainted with?—It is mostly from the fall of the roofs, and neglect of putting timber.

5097. Have you any complaint to make about the supply of timber in your district?—The masters find it generally; I think they find it at Snibston and Culloden.

5098. Where do they find it?—It is near to the pit; the men can have it for the asking.

5099. Who brings it down?—The men go and cut it themselves (there is a cross-cut saw), and then it is sent down the pit.

5100. Who takes it down?—The banksman at the pit's mouth will put it on the waggons and send it down in the pit, and then they take it along the main roads.

5101. And

5101. And then the boys will take it to where the workmen are working, I suppose?—Yes.

5102. It is taken very near their working place?—If the boys do their duty, they take it into the place.

5103. But the men have to cut it themselves when they want it?—Yes.

5104. Have you any complaint to make upon that point?—No.

5105. You think that the supply of timber is sufficient, then?—Yes.

5106. Does the viewer go round and see that the roofs are properly propped?—Yes, he goes round the men's places; he should go through every morning; and when he sees that there is timber or anything else wanted, he makes a note of it.

5107. If the workman has neglected to prop the place where he is working, is he fined for it?—Yes, the viewer tells him of it, and he is fined then.

5108. What becomes of that fine?—I cannot tell what the masters do with it; they keep it from the man; he never sees it again at all events.

5109. Is it not paid to the sick fund?—There is no rule for that, that I know of.

5110. Is the sick fund managed by the agents in the mines which you are speaking of?—Yes, the men are compelled to pay 4*d.* a week to the sick and accident fund.

5111.—That is only a small stoppage, is it not?—No, I think that 3*d.* is the general rule, but it is 4*d.* at Snibston.

5112. Have you anything else which you wish to state to the Committee?—There is one thing which I should like to say with reference to the ventilation, which the men wish me to state, and that is this; when a place is finished, instead of keeping that road properly ventilated, or gobbed as we say, they will just put a signal board up with "fire," or "danger" or "damp," or something like that written on it; and, I know for a fact, that several men have gone in hunting after some things that they have lost perhaps, and the gas in the place has exploded, and the men have got burnt to death. We want them to gob up those places altogether, or to keep them properly ventilated, then the men could not go in, or, if they did go in, it would not be dangerous.

5113. But what could a man be looking for in an old working of the description you mention?—The last man who was burnt was a man who worked at Cinder Hill; there were many rails which had been left in that place, and he wanted rails in the place where he was. They had not put the rails up; he had asked the fireman many time to get him some rails, and he promised him that he would. One morning he wanted them very badly, and he went in with a lamp, and when he got a few yards in the place the gas exploded. Of course there was a signal board up, and the man knew that he had no business to go into the place; but if it had been made up, or properly ventilated, that accident would not have happened.

5114. Was anybody else hurt on that occasion besides the man himself?—A boy was hurt very badly, but he recovered. The man was burnt to a cinder almost.

5115. Was the boy who was burnt working with the man?—The boy was outside; it was only the flash from the fire that knocked him down; it did not burn him.

5116. It was not enough to hurt anyone in the main way?—No, when it got into the main way, it was forced back again.

5117. Mr. *Vivian.*] I suppose that you are working not at long wall work, but at stall and pillar work?—No, they do not work on the stall and pillar plan in Leicestershire; they work in a stall 25 yards long, perhaps, and the men that get the coal chiefly get it at night, and then there is a man that goes and sees that the place is safe; it is not long work, but ribs and pillars.

5118. *Chairman.*] They cut the coal at night chiefly, I understand you?—Yes.

5119. Mr. *Vivian.* Are there pillars or ribs left between these wide places?—No, there is nothing left.

5120. Why should such places as you have referred to be left standing; you suggest that they should be either stowed or ventilated; do not the men intend to work in them again subsequently, or for what object are these places left?—If we start a main road they will set stalls all the way along, mostly on the rising side; when they get a certain distance on, they will drive another main cross road, and start new roads out again, and when they drive across, all those are cut off.

5121. Then there are ribs of coal standing?—No, it is all cut off.

5122. With regard to these places, which you recommend, should either be ventilated or stowed, is there solid coal standing beyond them?—Yes, they are not for any use at all.

5123. Is there solid coal standing further in?—Yes.

5124. Then, you would suggest that they should be stowed, in order to prevent the possibility of men going in who have no business to go in?—I have heard it at times in the mine, when it has seemed as if all the earth was coming together; it is what we call the top settling. If a man heard that, whether there was danger or not, he would try to get out of the road, and if he were to do that, if he had a naked light, he might set fire to the damp. In fact, the man is either going to be burnt, or to be killed by the fall of the coal.

5125. Does that alternative often happen; is it a matter of constant occurrence that a man must either be burnt to death or crushed to death?—On certain occasions.

5126. How often has it happened to your knowledge?—I cannot say how often.

5127. Has it happened, to your knowledge, twice in your life?—More than that; a man has not always the presence of mind that is necessary. If he had the presence of mind to put the light out he would not get burnt.

5128. You suggest, as I understand you, that these places should be either ventilated or stowed in order that a man may take refuge in them; but if they are stowed, how can a man take refuge in them; it would not help him in that respect, would it?—No.

5129. Then the man must be crushed in that case?—Yes.

5130. How many men in 20 years have been crushed in your mine in that way?—I cannot say; there have been many killed in Leicestershire.

5131. How many would be killed every 20 years in your mine in that way?—I should say from 10 to a dozen on an average in Leicestershire.

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5132. From falls of roofs?—Yes.

5133. Those men would not have been crushed if there were places for them to get to properly ventilated?—I should not lay it against the ventilation.

5134. It would be a difficult thing, would it not, to stow all the places in a mine?—Yes.

5135. Have you any idea of what the expense would be of stowing in an extensive mine all the open places?—Not a great deal; because they send the stuff out of the pit if it is rather near the bottom, if a man has got a contract job in the main roads.

5136. You think that the places that are not in working might be gobbed at a very trifling expense?—Yes.

5137. Did you ever represent to the inspector of your district that these points require attending to?—I have never seen him.

5138. Did you ever take the trouble to represent such things to him?—No.

5139. What do you think it would cost you to do it?—I cannot say.

5140. Do you think it would cost more than 1*d.*?—Perhaps not, if I knew where to direct a letter to him.

5141. *Chairman.*] By gobbing, you mean filling up with rubbish, do not you?—Yes.

5142. Have you anything else which you wish to state to the Committee?—No; I do not think I have anything else to state.

Monday, 7th May 1866.

MEMBERS PRESENT:

Mr. Clive.
General Dunne.
Sir Philip Egerton.
Mr. Wm. Orme Foster.
Mr. Greenall.
Mr. Liddell.
Mr. Neate.

CHARLES NEATE, Esq., IN THE CHAIR.

Mr. WILLIAM MILLWARD, called in; and Examined.

Mr. *W. Millward.*

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5143. *Chairman.*] WHERE do you come from?—From Tipton, in South Staffordshire.

5144. What are you?—A working miner.

5145. Where do you work?—Under the Earl of Dudley.

5146. At what colliery?—At Coneygree.

5147. How long have you worked there?—Five years.

5148. Where did you work before?—I worked before under Messrs. Amplitt and Dixon.

5149. Was that in Staffordshire?—Yes.

5150. Have you ever worked out of Staffordshire?—Yes, in Shropshire in my earlier days.

5151. When did you begin work?—I began work between seven and eight years of age.

5152. Was that in Shropshire?—Yes.

5153. Is it a large colliery where you are working?—Yes; it is a large colliery.

5154. Are you acquainted with the other collieries in the district?—Yes; with most of them.

5155. Are there many children and boys employed there in proportion to the men?—Yes.

5156. By boys, I mean boys under 14 years of age; what number of such are employed there?—I cannot tell exactly the number.

5157. To every 100 men, how many boys under 14 should you say were employed?—I should say from eight to 10.

5158. And of those boys, how many would be under 12?—It may be about three or four; I should not think there would be more.

5159. Have they continued, then, to take boys under 12 years of age since the Act of 1860?—In some instances it has been so.

1560. When they do come under 12, do they require a certificate?—No; they do not.

1561. They never take them under 10 years of age now, do they?—In some instances I have heard of their doing so, but I am not able to speak directly to any instance of that.

5162. Has that been the case recently?—Yes, I have heard of it in several cases.

5163. What do the boys do in your colliery?—The smaller boys generally have to carry dirt or slack from the men, sometimes to open doors, and sometimes to mind jig chains as they call them.

5164. What are jig chains?—They are what they call jennying chains in some counties.

5165. What do you mean when you say that they carry the slack away?—That is chiefly in the thick coal mines, where the undergoing is; the little boys drag the slack from the men there, they drag it in iron baskets.

5166. Along the tramway, I suppose?—It is carried out into what they call openings.

5167. They draw it along the ground, do they?—That is to say, under the ground from the face where it has been got.

5168. Is that hard work?—It is for little boys.

5169. Is there any tramway to draw it along, or how is it drawn along?—It is just to where they can bring the skips that they take the baskets.

5170. What weight would there be in these baskets?—I am not prepared to say exactly, I have never weighed them, of course.

5171. But it is hard work for a boy to carry them you say?—Yes.

5172. How many hours do the boys work at that?—The boys average, I should say, from 12 to 13½ hours from home.

5173. How long are they in the pit?—Twelve hours, perhaps 12½ in some instances.

5174. When do they begin?—At six o'clock in the morning or night, whichever it may be.

5175. When do they come out?—The signal is given in most instances at six o'clock, but it is often half-past before they can get out.

5176. What are the drawing hours in the mine?—Twelve hours.

5177. Do the boys go to school at all between the ages of 12 and 14?—I do not see that they can do it.

5178. Do they seem very tired when they come out of the pit?—Yes.

5179. Do you see them lying down at such times?—Yes, they often go to sleep; two and three I have seen before now lying asleep at a time.

5180. Have they any pony driving to do?—Yes, but it is generally larger boys that drive the ponies.

5181. Are the boys employed by the manager, or employed by the men?—By the manager of the colliery.

5182. Do not some of the miners employ their own boys?—Very seldom; if a man takes a contract of his own it may be so, but it is very seldom the case in South Staffordshire.

5183. Then you consider the boys overworked,

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as I understand you?—Yes, at that early age I think they are.

5184. What is the earliest age at which you think a boy should go into a mine?—I think not before he is 12 or 14 years of age.

5185. How long ought the boys to work between the ages of 12 and 14, do you think?—Eight hours.

5186. Have you any women employed at the pit's mouth there?—Yes, some few; not many about Tipton.

5187. Is there much feeling among the colliers against the women being employed?—Yes, there is; I could name one case of a woman who has been living within two doors of me; she has gone to work on the pit's bank since Christmas and left two little children (one an infant, and the other nothing better, for it can scarcely walk) in the care of a little girl, to cry and pine through the day.

5188. Is she the wife of one of the men?—No.

5189. They are mostly widows, are not they, who are employed on the pit's bank?—No; this is a youngish woman; her husband works, I believe, under Mr. Cresswell, and he is something in the labouring way at the furnaces, but what in particular I cannot say.

5190. What sort of wages does he get?—I have not heard; I think about 16 *s.* a week.

5191. Mr. *Clive.*] What is he?—He has something to do with the wheeling of the coke; something in the labouring way.

5192. Have you any family yourself?—Yes.

5193. How many?—Three.

5194. How old is the eldest?—He has just turned 10 years.

5195. When is he going into the pit?—Not so long as I can keep him out of it; he will never go in at all if I can help it.

5196. He will go to other work, you mean?—If I have it in my power to put him to it; but if not, he will have to do the same as I have done.

5197. What have your earnings been for the last month?—I am not able to say exactly.

5198. About what have they been?—I could tell what they have been in the last fortnight.

5199. What are you in the pit?—What we call a pike man.

5200. In the last fortnight what were your earnings?—I think I got 2 *l.* in the fortnight.

5201. A pound a-week?—Yes.

5202. And no more?—It may be 6 *d.* more or something like that.

5203. Cannot you tell at all what you were earning before that?—I cannot without some time to consider.

5204. Why were your earnings so small in the last fortnight?—Last week there was little to do; I played one turn in the commencement of the week.

5205. How many days did you play?—On Saturday I played; I played two days.

5206. Out of six days you played two?—Yes, last week, but not the week before.

5207. How many days did you play in the fortnight?—I cannot recollect any but the two; not whole days; perhaps I have not worked 12 hours all the other days.

5208. How many days of 12 hours have you made in that fortnight?—I cannot tell; the chief of our work is at nighttime; the last week I worked not at all at night, but by day; sometimes we do have that privilege.

5209. Do you think that you have done eight full day's work in the fortnight?—Yes; I did more than that.

5210. You have not done 10 perhaps?—I should not say that I had done 10.

5211. Nine perhaps?—More than nine, I think.

5212. Can you read and write?—A little.

5213. When did you learn?—I learnt chiefly since I have grown up; what little I know I learnt when I was growing up, in Shropshire, from 15 to 20 years of age; I had a very good aunt, my father's sister, and she undertook the management and government of me from about 14 to 20, and she gave me some little education and introduced me into the National school by the minister, and I had some instruction from him and the schoolmaster together, and I have gleaned a little through life by night chiefly.

5214. Have you any doubt that your average wages are as much as 25 *s.* a week?—I have no doubt that a man can get that if he has got the work to do; but in pits there are many things that keep the men from that. Of course, sometimes there are too many hands, and at other times there are other things, such as winseys breaking, and things of that kind interfering with the men's work.

5215. But, taking the year through, you earn more than 1 *l.* a week, do not you?—No; I should be glad to do so. In some instances, when trade is very brisk and good, you may do it, but it is often the case that we do not come up to 15 *s.* I have been in that colliery for weeks and weeks, and have not earned 15 *s.* one week; that is when trade has been slack.

5216. Mr. *Liddell.*] Will you tell the Committee what is the precise nature of your work?—I think I can go through any branch, no matter what it is.

5217. What are you doing just now?—I am a pikeman; I am engaged in holing the coals.

5218. And you work by the piece?—Yes.

5219. Not by the day?—Sometimes by the day; that is when they want it. When it is necessary to work by the day we have to go by the day.

5220. When you work by the day, you do extra work or accidental work?—That is what we call accidental work. If any men are hurt or stop away, or if anything occurs in that way, we have to go in their places.

5221. Is it a very hard coal that you are working at?—The nature of the coal is hard enough, but the undergoing that I have worked at is not so hard, but it is very wet.

5222. What is the average number of hours that you have worked a day in cutting?—We scarcely ever work under 12 hours, because our work is chiefly nightwork; there are some few exceptions. Sometimes one man out of six or eight will work by day, and then, perhaps, he will not do so much work, and he will get home sooner.

5223. You do not work so many hours by night as you would by day, do you?—Yes; we work more, generally.

5224. Do you work 12 hours regularly at night?—Yes.

5225. And you do not earn, on an average, more than 15 *s.* a week at that work?—Now we can; but it is when there is a scarcity of trade that we cannot.

5226. Are you paid once a week, or once a fortnight?—Once a week.

5227. Mr. *Foster.*] With regard to the boys whom you speak of, and whom you would wish to limit to eight hours' work a-day, would the fact of those boys coming up at the end of the eight hours' work necessitate the stopping of the engine drawing coal?—I do not think it would.

5228. The boys drive the ponies, do not they?—Not at that young age. I think there are very few boys under 14 years of age who do drive ponies; in fact, it is a man, I should say, that drives our ponies at this very time.

5229. Is it the case generally through the district that there are not boys under 14 employed in driving the ponies?—There may be some few exceptions, but very few; the boys under 14 would not be of much use, because the skips now are not what they used to be, and little boys could not lift the skips when it was necessary.

5230. Do you call boys under 14 little boys?—Yes, they generally are in the case of miners' boys, through work, and perhaps bad keep, and other things. There is a boy who was at work some short time ago where I am now, and his father says that he is 14, and I am sure he is very little bigger than my boy, who is 10; it is so in some cases.

5231. How many men are employed in the pit where you work?—About 16 or 18, perhaps, where I am at work.

5232. How many boys under 14 are employed to that number of men?—There is but one now; he is near upon 14; he got hurt last week and is not at work now. He is the only one at present of that age.

5233. How much coal is drawn at these pits a-week on the average?—I am not prepared to say exactly; there is a great deal of dirt. It is a bad place in some respects, I believe, or else there would be more.

5234. Do you think that the statement which you have made with respect to the effect of the boys coming up at the end of eight hours is applicable to pits of a much larger character than the one where you are now employed?—The size of the pit may, in some instances, make a difference, but I do not see it. The chief of the boys at such a young age are employed, as I said before, in dragging out the slack or dirt, and just simply minding those jig chains.

5235. Supposing that in a large pit where a considerably greater number of men are employed than are employed in the pit where you have worked, some boys were engaged in drawing the slack from the men actually at work, and others in minding the jig chains, how could the work of the pit be carried on if those boys left the mine at the end of eight hours' work; who would mind the jig chains and do the work that these boys do?—Of course there would have to be bigger boys put in their places.

5236. Do you think that if boys were kept out of the pit until they were 14 they would have any disposition to work in the mines afterwards?—Yes, I have no doubt they would in many instances afterwards, and besides if the boys had not a disposition, the parents would often make an effort to push them into the mines.

5237. You do not find any indisposition on the part of the boys themselves to go down the mines, do you?—Not with some of them, though in others we do; but it is the ignorance of the boys that we have to complain of more than anything else.

5238. Would you wish to deprive a woman, under any circumstances, from the right of making use of her labour on a pit mount if she felt disposed to earn her living in that way?—I simply look at it in the light of the bad effect it has upon her children rising in the world; they must be neglected in every respect, as in the case of the woman that I referred to just now, Mrs. Brighton, who is at work now, leaving her two poor little things neglected.

5239. Are there not widows and single women earning their livelihood in that way who have not children at home?—Yes; I believe there are.

5240. Would you wish to deprive an able-bodied woman, who was earning her livelihood in that way, of the right of doing it if she felt disposed to do it?—I would seek the general good of all; it may come hard upon some persons.

5241. *Chairman.*] How came you to work at night rather than by day?—The work is so put out that the undergoing, that is to say, the preparing or getting the coals, has to be done in the night, for the boys to draw in the day.

5242. So that the men and the boys do not work at the same time?—Not all of them.

5243. Some of the men work by day, do they?—Yes.

5244. It is not your own choice to work by night?—No; I never should work at night if I could help it.

5245. You have to cut at night the coal which is to be drawn out the next day?—Yes.

5246. How is the ventilation in your district?—In some places it is very good, and in some places it is very inferior; we have had great complaints in some cases.

5247. Where there is anything the matter, what is the fault?—Insufficiency of air to take away the black damp.

5248. You have not got explosive damp, then?—In some parts of the district, but not very much.

5249. In the district of which you are speaking, there is not much explosive gas there?—There is not much, but in some places it does exist.

5250. Is the defective ventilation owing to the fact that there is not sufficient air, or is it that the airways are not stopped up where they ought to be?—It is the insufficiency of the air, it is not sufficient to carry the gas away.

5251. I suppose that the pit is ventilated by a furnace, is it not?—Only in very few places; some times there is a fire put in the drawing shafts.

5252. Are there two shafts in all the collieries?—In most of them.

5253. Are there any collieries where there is only one shaft?—I do not know one such.

5254. Where they have two shafts do not they use one as a ventilating shaft for the furnace; they have a furnace in the ventilating shaft, have they not?—Sometimes they have.

5255. If they have not a furnace, how do they manage it?—Sometimes the air will take its course without a furnace; at other times it will not, and the air will go up one shaft and down the other.

5256. Sometimes you say that there is a sufficient current of air without any furnace?—Yes; in some pits.

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5257. You say that in some cases the ventilation is not sufficient?—It is not.

5258. Have you known many accidents from defective ventilation?—Not very many accidents; there have been some. There is one man now that is disabled and most probably for life, who was burnt 12 months ago in Tipton near to the station, and there are other cases like that.

5259. Mr. *Clive.*] Near what station?—Near Tipton station.

5260. *Chairman.*] But the accident happened in the mine, of course?—Yes.

5261. You chiefly suffer from the black damp, do not you?—Yes.

5262. Does the health of the men suffer much from that?—Very much.

5263. Is the air carried through the mines by doors, or how?—By airways, with doors in some instances, but the airways are sometimes allowed to go rather bad, and then the air is of course bad.

5264. And it is carried up by brattices to the working face, is it not?—It is not carried up in that way; it is carried up by airways, either driven in the face, or carried through the gob; in Staffordshire I never knew any other case; it is driven through the face by heading, or through the gob.

5265. And carried right up to the working face, is it?—Yes, in some instances.

5266. How far have you ever had to work from the current of air?—They vary a good deal in that respect.

5267. How far have you personally ever had to work from the current of air?—I have had to work as much as 50 and 60 yards beyond the current.

5268. The current being behind you?—Yes, but that has not been within the last three years.

5269. There has been an improvement within the last three years, has there?—Yes, in our mine, there has.

5270. Have you many accidents from falls of roofs?—Not in the thin mines, but in the thick mines.

5271. What do you call a thin mine, in Staffordshire?—The thin mines are called by different names, but they are all called thin, except what are called thick.

5272. What is the thickness of the seam in your mine?—In Coneygree I think it is about ten yards, but in some places it is more.

5273. Where you are working you call it, as I understand, a thin mine; what is the thickness of the seam there?—Ours is about six feet, perhaps, sometimes a few inches over.

5274. And you are not very liable to falls of the roof there?—We leave part of the coal up for the roof.

5275. You work by pillars, do you not?—No.

5276. What is the width of the galleries in which you work?—Our work is not square work, but we leave some coal up for the roof, which is much better and safer than what is above the coal.

5277. You work in the long wall system?—Yes.

5278. Mr. *Liddell.*] With timber props?—Yes.

5279. *Chairman.*] Are you properly supplied with the timber props?—Yes.

5280. How far have you to go for them?—We have nothing to complain of in that respect.

5281. Do the masters charge you for the timber that you use?—No.

5282. You may take as much as you want, without being charged for it; is that so?—What is there we have the use of.

5283. You have no complaint, then, to make upon that point?—We have no complaint to make on that point.

5284. Do you often see the inspector?—I never see him at all at the pit, but I have seen him at an inquest once. I should not have known him else.

5285. Did you ever hear of his going down the pit?—I have heard of his going down when there have been accidents.

5286. Should you say that his practice was to go down when there was an accident?—Yes.

5287. How long ago was this inquest that you refer to?—It was about 12 months in February last.

5288. What was the nature of the accident?—There were three men drowned.

5289. From the breaking in of water?—Yes.

5290. What was the verdict?—I believe it was brought in as accidental.

5291. Were the men satisfied with the verdict?—Not altogether.

5292. What was supposed to be the cause of the water breaking in?—The coal being cut under the canal, and it being so shallow. There was an old shaft close to the side of the canal, which had been filled up in years gone by, which the managers pretended they did not know of; but they found this old shaft before the water broke in in the cutting of the coal.

5393. Did they give notice to the manager of that?—He stated to the jury that they had not done so.

5294. However, there was some dissatisfaction as to the verdict?—Yes.

5295. Is there generally satisfaction with the coroner's verdicts, should you say, in that district?—There is not.

5296. Do the men desire any alteration in the composition of the juries?—They do.

5297. What alteration do they desire?—They think that some miners ought to be on the jury.

5298. Were the men who were working with those three men who were drowned summoned on the inquest?—Yes, I believe they were.

5299. You do not hear any complaint, then, that proper witnesses are not summoned when there is an inquest?—No, the witnesses were summoned, I believe, properly in that case.

5300. A workman would not be afraid of going to the manager, and saying that he wants to give evidence; do you mean to convey that to the Committee?—He might not be afraid to go, but a great many are too cowardly to make a honest confession; that is where it is.

5301. How came you to be working at so great a distance from the current of air as you were in the instance to which you have referred; what was the cause of it?—It was from the want of a proper airway.

5302. The airway had not been carried far enough up, you mean?—It was not carried at all in that distance any more than from the direct road at the bottom.

5303. Mr. *Liddell.*] Are the mines in Staffordshire mostly shallow mines or deep mines?—They are deep and shallow; most of them are shallow, I think.

5304. What is the depth of the mine you are working

working in now?—It is about 36 or 38 yards, I suppose.

5305. I understood, from an answer you gave just, now that you ventilate your goafs for the most part?—Yes, we carry the ventilation through the gobs in some instances.

5306. That is the general practice, is it?—I think it is chiefly the practice.

5307. Then it is unusual to wall them off?—There are some mines (it is according to how they are driven) where they get the coal from the shaft; in others they bring it to the shaft, and in some cases there is proper heading in the coal to take the air to the face.

5308. It is not the practice then, I understand, in Staffordshire to wall off the goaf?—I think I have not properly understood the question.

5309 You told us just now that the gob, as you call it, is for the most part ventilated; I want to know whether there are many places where the coal has been worked out which are walled off in the pits, that you are acquainted with?—Yes, they are chiefly built up in most places.

5310. Then I cannot reconcile that with your answer, that the ventilation, for the most part, is carried through the gob?—This is a place kept for a special purpose to carry the air; that is to say, it is not built up there, but it is kept for a special purpose to carry the air away, and it answers the end quite as well if it is only kept in good repair.

5311. Mr. *Foster.*] You spoke of the work being chiefly by night in which you are now engaged; is it the general custom in South Staffordshire, at the great majority of collieries, to be so employed?—It is with the pikemen, in many instances; but there are some exceptions, I believe, where collieries are better managed and better driven out, so that they can do without it. I believe it can be done without in most collieries if they are only driven out in the right form. Perhaps it may take a little more money, but in the end it would be quite as beneficial to the master I have no doubt. There have been complaints of getting the thick coal in one face.

5312. *Chairman.*] You are aware, are you not, of the general rule about bore holes in the Act of 1860, with regard to ascertaining whether there is water?—I am aware that there is such a rule.

5313. Were there any bore holes made in the place where the water came in on the occasion you have referred to?—No, there were not, I believe; in fact, I do not think that they expected this old shaft.

5314. But they knew that they were under the canal, did not they?—They knew that they were under the canal, of course.

5315. And how far under the canal were they?—I believe that they were as much as 50 or 60 yards the other side of it, and this was the second or third time that the canal had broken in; they were right past the canal in some branches of the work, but not in this particular direction.

5316. How high was the canal above their heads?—It was stated, I think, that it was more than 30 yards, but in my opinion it could not be nearly so much.

5317. If it had been 30 yards, it would have been quite safe, would it not, except for this old shaft?—Yes.

5318. Have you measuring or weighing in your district?—The coal in that country is chiefly measured; there is some little weighed on putting the coal into the boats. Most of the work in that country is got by butties or men that contract; there are some few exceptions, I think, where the men get by the ton.

5319. Have you ever got paid by weight?—No, I never have.

5320. Are there any disputes about the measuring of the coal?—I have not heard many disputes about the measuring, at least not with the men themselves, but with the butties I have. I have heard disputes with the men who have had to get ironstone by the ton.

5321. In these mines there is ironstone as well as coal?—Yes, in some instances.

5322. What do you mean by butties getting coal by contract?—They take it off the master at so much a ton, and they engage the men to work for them.

5323. Then the disputes you have heard of are rather between the butties and the men that they employ?—Yes.

5324. What is the contract that a butty makes with the master?—We do not always get to understand how much they give; that will vary according to the mine.

5325. I mean the nature of the contract; not the rate of pay?—They take a contract to get the coal at so much a ton, and the butties find the timber and everything necessary.

5326. Mr. *Clive.*] I thought you said, that in your mine you got as much timber as you liked?—We have in the place where I am at work now, but it is not always the case.

5327. *Chairman.*] Is there a general preference for the weighing over the measuring system?—I believe there is.

5328. Is there any great desire among the men to have their work paid by weight?—Those that have worked by the ton, and do work that way, I believe desire it. In some places, of late, they have commenced this plan of the men getting the coal by the ton. In the Mott Colliery, for instance, they have commenced it, and it appears more satisfactory to the masters too.

5329. In the colliery where you are at work have the men got a check weighman?—No we never hear anything of that there.

5330. Mr. *Foster.*] Can you of your own knowledge explain to the Committee, any points that those men would wish represented who are paid by weight?—I will not speak of that which I do not know; I cannot say that I have heard anything particularly from the men on that subject, any more than that I have heard complaints of the unjust size of the boats when the men have got stone by the ton; but in no other cases have I heard complaints.

5331. Will you explain to the Committee the mode in which the coal is got in South Staffordshire?—The principle on which we work is the undergoing, there is not much cutting of the coal, only where there is occasion for loosening; we work under the coal chiefly, taking away what is under the coal so that it is ready to be taken down; we have so many yards to a day's work.

5332. Mr. *Liddell.*] Then it is carried away by the butties?—By the butties; they engage men to do so.

5333. They contract with the masters for carrying away the coal?—And for getting it. It is not the masters who pay the men by the yard, but the butties in general.

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5334. They contract for the whole work, in fact?—Yes.

5335. And they engage men to do that work?—Yes.

5336. *Chairman.*] The boys are employed to carry away that slack which is cut away?—Not there; this dirt we build up generally in the gob behind.

5337. How often are you paid in this district?—Weekly, chiefly; there are some few exceptions, but not very many.

5338. Where are you paid?—Chiefly at the pit's mouth.

5339. Are you expected to go to the masters' shops at all?—There are very few places where there are eatables to be bought on the truck system; but in most cases they have that system for drink; it is generally carried to the pit.

5340. Are you paid in a public-house?—No. I think there are some exceptions where they pay in a public-house. I have heard of such cases.

5341. How near to a public-house are you paid?—We are paid on the pit's bank.

5342. And how near is that to a public-house?—I should say that it is nearly a quarter of a mile from it.

5343. To whom does the nearest public-house belong?—To Benjamin Mellor, I think.

5344. He is not the owner of your mine, is he?—No.

5345. Has he anything to do with the owner of your mine?—No.

5346. Mr. *Foster.*] Who is the owner of your mine?—The Earl of Dudley.

5347. And the Earl of Dudley would not be likely to keep a public-house, I presume?—No.

5348. *Chairman.*] Do the butties often keep these public-houses?—There are very many instances where these butties or contractors keep public-houses in Staffordshire, and that is what we have to complain of; not that the employers themselves do it. I believe that there are very few of the employers who hold with that system.

5349. Do the butties show any preference to the men that go to their public-houses?—They do, in many instances, and in cases when trade is bad they keep the men that drink the most, and are the most reckless. A man who would refuse to have anything to do with the system is not, perhaps, in a direct way, sent away, but some fault is sure to be found with him, and in many other ways he has to suffer.

5350. You have spoken of a public-house which is a quarter of a mile from the place where your pit is; by whom is it kept; is it by a butty?—Those that we complain of are kept by the butties.

5351. But there is no public-house close to your pit's mouth that is kept by a butty?—Not close to ours.

5352. You are speaking of other pits, then?—Yes, of other pits.

5353. Mr. *Clive.*] Where did you work before you worked in this mine?—I have worked a great deal in Staffordshire these last 24 years.

5354. In every place you have been in was the contractor's system going on?—There have some few exceptions, I think; I worked under Mr. Hopkins where there was no butty, and at Dudley Port I worked under Mr. Foster about 23 or 24 years ago; there were no butties there.

5355. Are all Lord Dudley's collieries worked by butties?—Chiefly; I do not know that there are any that are not.

5356. Who is the Earl of Dudley's manager now?—Mr. Frederick Smith, I believe.

5357. Mr. *Liddell.*] What is the average number of men employed by a butty; what is the gang?—It is according to the mine, or whatever it is; sometimes they will not be over 20, at other times they may be up as high as 40 or 50; but that is considered a large pit company.

5358. I gather from that, that in this mine where you work there is only one butty, because you said that there are about 16 men employed; that would be one gang under one butty, therefore, I suppose?—Yes, unless there should be two contracting together as partners.

5359. Mr. *Foster.*] Are the butties in the colliery in which you are employed allowed to keep public-houses?—Some of them do; I am not aware that Mr. Smith allows fresh butties to take them, but the old butties that are butties of some years' standing, I think, are not interfered with.

5360. Would you consider that it is an old abuse which the employers generally are endeavouring to do away with?—I should hope it is in some instances; but there are some of the employers, such as royalty masters, that do not care what is carried on so that they can get the coals cheap; that is their object, and they care little except for that, I think. The chief of what we consider our large masters are, I believe, against it.

5361. General *Dunne.*] You said, I believe, that the liquor was brought to the mouth of the pit?—Yes.

5362. Is it brought by these butties or contractors to the mouth of the pit?—Yes; it is sent there by the butties.

5363. To induce the men to take it, I suppose?—It has been a custom for years for every man to have a quart of ale when he has his pay; the excuse of the butties has been that they cannot get change without that.

5364. The butty gives you that quart of ale in part payment, I suppose?—No; we have to pay for it at the pit's mouth.

5365. You receive the money and then pay for the drink?—Yes; and it has a very bad effect upon the workmen.

5366. Will they give them more than a quart of ale if they ask for it?—Yes.

5367. Do they ever get intoxicated in that way?—I have never seen any of the men get intoxicated at the pit's mouth, but it has so set them going after they have been working hard and have been, perhaps, three or four hours without anything to eat, that when some one has said to them, "Let us have a glass here or yonder," they have forgot their family interests, and their families have had to suffer; if these men could have gone safely home without touching intoxicating drink, I think the probability is that after they had had a cup of tea or something of that sort, they would not have gone out for the night, and if they had gone out, the beer which they might then have taken would not have had so much effect upon them; the present system causes a great deal of degradation in Staffordshire.

5368. You think that it encourages continued dissipation?—Yes.

5369. Is that the custom in all the pits you know, or only in one special pit?—It is done at most, but not at all.

5370. Mr. *Foster.*] On what occasions?—On the pay days, and, in some instances, they have what they call the foot ales; but it is not so bad as it was formerly in that respect since the law has come to bear upon it.

5371. Mr. *Clive.*] Do you know any case where the butty actually pays in drink, or does he pay the men in money and induce them to go to his public-house afterwards?—This drink is sent for to the pit; the butty pays the man, but the man has to pay him for the drink.

5372. Does he retain the wages for the drink?—No; I do not know a case of that kind.

5373. Mr. *Liddell.*] Is there much credit allowed?—Yes; I believe that to the men, in many instances, there is.

5374. There are big scores run up, I suppose, at the public-houses?—Yes, in many instances.

5375. *Chairman.*] Then if a man has not paid off his score one week, is it stopped out of his wages the next week by the butty?—I do not particularly know of any case where it is so; of course, if the man does not pay for it he is soon done for.

5376. Have you any accident clubs at these collieries in your district?—Yes, we have.

5377. Who manages them?—It would puzzle me to tell that. There is 4 *d.* a-week deducted off our wages for the club.

5378. It is managed by stoppages, you mean?—Yes.

5379. Is there any account given to the men?—Not at all; and it is considered by the men a very great piece of oppression. There are many instances that are fresh to my recollection, where the men have been so disabled for life, or are so disabled now, that they cannot work, and they are entirely thrown upon the mercies of the country, after having had deducted out of their wages 4 *d.* a week for this accident fund, which we consider would be sufficient to provide for cases of sickness as well as of accident. But in sickness (and it does not matter how the sickness comes on), there is nothing allowed to us. The masters, some of them, behave very well on the death of a man, and in some places there is very little complaint; for instance, under the British Iron Company, and Mr. Foster, and the Earl of Dudley. In fact, I believe that the men would prefer keeping the present system in the case of those three companies; but in the majority of places it is very bad.

5380. The men are acquainted with the rules of the club, I suppose?—I do not know of any rules whatever; there are no rules; at least, we never knew of any, and it is simply this: if a man gets hurt, he asks his butty for a note; he will give him one, or go to the office and get him one, and then he goes to the doctor, and the doctor gives him a note to go back and ask for the money. I remember, some six or seven years ago, hurting my arm, and being disabled for five or six weeks, and the butty sent me to the clerk; he was 16 or 18 years of age, and he snapped at me very sharply, and I took it very hard. I had to go back to the butty, and fetch him. The clerk was looking upon me as if I had come to steal something. I went back to the butty, and brought him, and then my note was given me. We have these inconveniences to go through in some instances; in most instances, in fact.

5381. You mean that there is great dissatisfaction with the way in which these clubs are managed?—Yes; there is a man in Tipton now, that has been disabled for the last 12 years, and has not a penny coming in. There is a very near neighbour of mine, who once worked in a mine, and is now disabled, and his pay was stopped last Saturday week.

5382. How long had he any pay?—About 12 months, or near upon 12 months; and another man had his pay for a while, and had it stopped some short time ago, but the men undertook to pay it for him.

5383. Have the men a club of their own besides?—No.

5384. They might if they chose, of course?—They might if they chose; but of course having this money stopped back, and other things like that, rather riddle the wages. In some instances where a man has worked at two places in one week, even if he has only done one half-day's work at one of them, I have known the 4 *d.* stopped at both places.

5385. Have you known of clubs managed by the workmen?—Not in that country; there are no accident clubs that I know of.

5386. Mr. *Greenall.*] Are you a member of any sick club yourself?—No, I am not.

5387. Mr. *Foster.*] What relief do you understand that, in the event of accident or of being disabled, you should get from the clubs of such colliery as that where you are now at work?—They allow us 6 *s.* a-week; there are some places where they will not allow more than 5 *s.* I think.

5388. Under what circumstances is the weekly allowance made; for illness or for accident?—For accident, not illness; and we think that it is sufficient for illness as well, according as like clubs of our own generally are.

5389. What other allowances are made?—There are very few allowances.

5390. Is the doctor's attendance found in addition?—Yes; and sometimes it is very poor attendance.

5391. In the event of a man being unfortunately killed, what is then allowed?—Sometimes they will allow the widow the pay for three months or six months, according to the master the man was under, or 12 months; and in some cases, such as the masters I have already mentioned, they have allowed it for 20 months, and 20 years, I have been told, even. They do not complain in those places so much, but in other places, as a rule, the widows are put off very soon from the fund.

5392. Is any sum paid, on the death of the man, besides the allowance to the widow?—I have never known any more than perhaps just finding the coffin and the burying fees, and something like that.

5393. The period during which the allowance to the widow is continued varies in different collieries, you say?—Yes.

5394. Mr. *Liddell.*] Do you think that a stoppage of 4 *d.* a-week ought to cover sickness as well as accident; or would a further deduction be requisite if the stoppage was to cover both cases?—I think it would be quite sufficient to cover sickness as well. We have clubs, and plenty of them, where they pay their 1 *s.* or 1 *s.* 4 *d.* a month, and they have it for sickness as well.

5395. Sixteenpence a month is just 4 *d.* a-week?—Yes.

5396. And in those cases the stoppage covers both sickness and accident, as I understand you?—Yes, at the clubs.

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5397. Does the club also undertake, in those cases, to provide a certain allowance for the widow, in the event of the husband being killed?—I do not think it does any more than perhaps 5 *l.* or 10 *l.*, varying, at the death.

5398. Are you well acquainted with these clubs?—I have been acquainted with them more or less through my history.

5399. Have you been a subscriber to these clubs at times?—Yes, I have.

5400. Do they often fail?—There have some failed, I believe, and others have continued for years and years.

5401. Do you think that the larger proportion succeed, or that the larger proportion fail?—I am not able to speak exactly upon that point; I know there are many that have failed, and I know that many continue.

5402. Have many failed with which you yourself have been connected?—Such as have been formerly held at public-houses have failed; we consider that now we have better management, because they are connected with religious societies, and chapels, and so on. For instance, there is the Wesleyan Assurance; that society allows as high as 10 *s.* a-week, and I believe that that society is increasing wonderfully. Of course, the sum is more, and there are more to pay into it.

5403. Are these clubs that are connected with the religious denominations, generally speaking, under the management of the minister, or does he take an active part in their management?—No, he might give some advice; but they are under the management of some of the members of the society.

5404. *Chairman.*] How much more do they pay to a club when they get 10 *s.* a-week?—I think it would amount to as much as 2 *s.* a month.

5405. Mr. *Greenall.*] Do not you find that when a sick club has been established, we will say, some years, and the members have grown old, there is a great unwillingness on the part of the young men to join the club; do not the clubs break down from that cause very often?—Yes, that may be the case; and it is, in some instances, I believe. But we have another complaint about these accident funds; for instance, I go and work at a pit, and that pit or colliery may be finished, say, the next week, and I am disabled for life; the master does not pay the allowance to me any longer if he thinks proper.

5406. My remark was intended to bear, not upon the accident clubs, but upon the sick clubs?—I believe there have been some objections made in that way by the young men.

5407. Is it not universally the case?—I cannot say that it is.

5408. Mr. *Clive.*] Is it in your experience that the men make use of the post-office savings bank?—No, I do not think that they do.

5409. Sir *Philip Egerton.*] Are the sick clubs of which you have spoken restricted to the miners, or can other persons belong to them?—They are for any one, of course, as well as miners; according to certain ages, they will admit any one.

5410. Then, any one applying to be admitted to the sick club can be admitted whether he is a miner or not?—Yes, if he is considered to be in a healthy condition.

5411. They are general clubs, in fact, and not restricted to the miners?—No; they are not restricted to them.

5412. General *Dunne.*] You say that in your district the stoppage is 4 *d.* a-week?—Yes.

5413. Who stops that?—The masters stop it; at least it is stopped off me by the butties.

5414. And you know nothing more of it?—No.

5415. The management is out of your hands?—Yes; and it is optional with them whether we get the benefit or not.

5416. Are you compelled to subscribe?—Yes; they do not ask me to do it; it is stopped out of the wages.

5417. If you objected, could they enforce it?—I do not know; of course if it is the rule of the colliery, they could dispense with me if I would not keep that rule.

5418. Do they ever give you any inspection of the accounts?—Never.

5419. Do you think that it would be satisfactory to the workmen to have the power of inspecting the accounts themselves?—I have no doubt it would be more satisfactory to them; but altogether they do not like it at all, because a man has no claim whatever upon the fund.

5420. A man who has this 4 *d.* stopped has no claim if the master does not choose to reckon it a claim?—Not the least.

5421. And you think that he should have a claim?—Yes.

5422. Would it not be more satisfactory that this fund should be managed by the workmen, or by people employed by the workmen, than that they should be left in the dark, as they are now?—Yes.

5423. Would you prefer inspection by the workmen, or would you entirely hand the thing over to the workmen?—We prefer managing it ourselves.

5424. Do you think that the masters add to the fund from their own private resources, or that they depend entirely upon the subscriptions paid by the men?—We do not know; we are left in the dark.

5425. Therefore it is merely guess work when you think that it would go further than to give this occasional relief?—Yes. As I have been led to understand, the masters have so much a-piece off the butties, and the butties have to deduct this 4 *d.*

5426. All this evidence that you have given, I understand to apply to the butties, and not to the proprietors?—It certainly applies more to them, but in some instances the masters do stop it; I have known cases where it is stopped by the masters themselves.

5427. When you speak of the master, do you mean the proprietor of the colliery, or the person who works the colliery?—The proprietor, I mean.

5428. Lord Dudley, for instance; you call him the master, do you?—Yes.

5429. Does he work the colliery himself or through contractors?—Through contractors.

5430. You say that, in the case of his colliery, there is no dissatisfaction with the money given to families when accidents happen?—No, there is no complaint there; nor with the British Iron Company, nor with Mr Foster; in the case of those three firms the men generally are satisfied with the system.

5431. Do you believe that in those cases the masters give assistance to the fund?—Yes, and they do not turn the widow or the poor man off after

after he is disabled so soon as the majority of masters do.

5432. Is the subscription the same in their case as in the other pits?—Yes, it is generally, I believe

5433. Therefore something must be given in those exceptional pits by the masters themselves out of their own resources to assist the accident fund?—I cannot say how that is.

5434. At all events, it is better managed in those cases?—Yes.

5435. Mr. *Foster.*] In the event of a man not belonging to any general sick or accident club, and of there being no field club, the man, if he got disabled from an accident in his work, would be either thrown on the parish, would he not, or upon the bounty of his employer?—We consider that we could carry on an accident club much cheaper than at 4*d.* a-week; and besides that, the man would have rules to go by, and he would know what he was trusting to.

5436. Would you insure every working miner belonging to that club?—Yes.

5437. What power could you bring upon a man fond, we will say, of spending his money in a public-house, which you have already alluded to, to compel him to belong to a sick or accident club?—We could not compel him at all.

5438. Are you not aware that there are very many men now in the receipt of ample wages who will not subscribe to a sick club?—I admit that; but I do not see why the man that will, and that has sufficient thought and care for himself, should suffer for those that will not.

5439. In what way do you mean that he would suffer?—By having his money stopped out of his wages, and then having nothing whatever to rely upon.

5440. Have you ever known a case in which a man has been disappointed by an undertaking given by the master, of relief in case of accident?—Yes; there is a case where the man has had relief for nearly 12 months, but it is stopped now, and the man is not able to work. That is under Messrs. Welch and Barrow's, at Tipton. I think they have had the coal as royalty, but still they are the masters of it.

5441. Still, having had a weekly allowance for 12 months, the man has, at all events, had some return for the money?—Yes, he has had some return.

5442. Do you know how long he has worked in that colliery?—I do not exactly know, but I believe five or six years; perhaps more.

5443. Is the man quite disabled from following any occupation?—He is at present, I think.

5444. Are you aware of the fact that men will sometimes keep upon the club-box in preference to taking employment, even when they are able to take it?—There may be such cases; I do not know of any myself; I have always found that the medical men have been sharp enough, if not too sharp, in throwing them off.

5445. You are quite satisfied that in the event of an accident occurring to a man who from his improvidence was not a subscriber beforehand to a sick or accident club, unless there was a field club, he would be utterly destitute, and would be thrown either upon the parish or upon the bounty of his employer?—That would be the case in some instances.

5446. Would it not be the case in all such instances?—Not in all instances; men would go into clubs.

5447. I am speaking now of men who would not go into clubs; in all instances of that kind, would not a man be thrown either upon the parish, or upon the bounty of his employer?—Of course it would be optional with the employer; he might be thrown upon the parish.

2448. Would there be any other resource but the parish for such a man, or the bounty of the employer, or of somebody else?—No; I do not see that there would, unless he provided in other ways, as he ought to do, for such circumstances.

2449. *Chairman.*] Have you anything else which you wish to state to the Committee?—In the inspection, I think that there is some improvement wanted. I do not know that there is anything else which I wish to state.

Mr. Benjamin Owen, called in; and Examined.

5450. *Chairman.*] Where do you come from?—From Bilston, in Staffordshire.

5451. What are you?—A Working Miner.

5452. Where do you work?—I work in the thin mines; I work at stone at present.

5453. You mean ironstone, I suppose?—Yes.

5454. Is there no coal in the mine?—Coal is underneath; what I am working now is a seam of stone.

5455. It is in what is called the coal measures?—Yes.

5456. There is coal underneath, you say?—Yes, and above.

5457. What is the depth of this mine?—Something about 60 yards where I now work.

5458. Are there boys employed about there?—Some few.

5459. How many boys are employed to every hundred men, understanding by the term "boys," those who are under 14 years of age?—I should think there would be something like 20 boys to every hundred men.

5460. How many of those boys would be under 12?—There are not many boys under 12; there are some.

5461. Do you know of any boys under 12?—I know of plenty of boys under 12; but I cannot exactly say where they work.

5462. You know that they do work, either in a stone mine or in a coal mine?—They work in both coal and stone.

5463. Can they read and write?—I am sorry to say that many cannot.

5464. Speaking of your own mine, the stone mine, what is the work that the boys do there?—There are not many little boys in our work at the present time. In some places they engage more boys than they do in others; ours is very heavy work, and does not require many little boys; all the little boys that we employ have to open doors, or something like that.

5465. Are there many women employed at the pit's mouth?—Not exactly at the pit's mouth, but on the bank, some 50 or 60 yards away.

5466. How long will the boys that you have got work?—From six in the morning till six at night.

5467. How long do the men work?—The men that work by day work the same time.

5468. Are there two shifts; are there some men working by night and some by day?—Not at our place; in our place the men work from six

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six in the morning till six at night, and so do the boys.

5469. Do any of the boys work at night?—In some instances.

5470. Is that common?—Not very. There is a great deal of night work with the men now, more than ever I knew before.

5471. Do the boys in your mine do anything else except open doors?—Not where I am now; there are not many small boys in that pit; there is no necessity for them; it is very heavy work—it is ironstone.

5472. Sir *Philip Egerton.*] Do you use horses under ground to draw the trams?—Yes.

5473. Who drives the horses; do not boys drive them?—Where I work the boys are older than 14 who drive the horses.

5474. General *Dunne.*] Then you have no complaint to make about the boys, as regards the colliery?—As regards the colliery, I do not approve of their working under 12 years of age; but in our place there are none of that age.

5475. Mr. *Greenall.*] How long have you worked in the mine where you now work?—Twenty-one years; I went to work when I was 10 years old.

5476. *Chairman.*] What are the difficulties that you have to contend with in the ironstone work?—Ventilation is a great grievance; there are not proper airways.

5477. Have you two shafts in your ironstone mine?—There is a general rule that there shall be one shaft opening into another, whether one is deeper than another or not. Where I work the shaft is shallower than where the air goes to.

5478. That is to say, that, after you have got to the bottom of the shaft, you work down?—There is a head driven straight away to the pit shaft; this pit shaft goes down further still.

5479. In what way does that affect the ventilation?—That does not affect the ventilation at all; it is carrying ventilation in other ways: that affects the air.

5480. What are the defects of the ventilation?—Not having the airways wide and high enough.

5481. Is the mine ventilated by a furnace?—Not our place.

5482. How is it ventilated?—The air takes its own course; it goes down one shaft and up the other.

5483. It is a natural draught of air?—Yes.

5484. Is not it ever assisted by a furnace?—In some instances, where there are bad windways, we are obliged to have it to force the air.

5485. You have got a shaft that you call the upcast shaft, and another that you call the downcast shaft?—Yes.

5486. And is there never a furnace in the upcast cast?—In the mine where I work there has not to be a fire often.

5487. Do you think that the fire is lighted often enough?—I think that if the windway were open sufficiently, they would not need one.

5488. How far have they to go for coal to keep the furnace supplied?—At the stone-pit they have to send it down.

5489. They would not have to go far for it?—There are coal-pits about the place, not far off.

5490. Belonging to the same master?—Yes.

5491. Do you work by narrow galleries?—No; ours is what we term low work, and you sometimes blast it towards the shaft, and sometimes from the shaft. When it is blasted towards the shaft, it is always better air, more especially in the coal; because when it is in the coal the airway is wrought out in the solid. If it is wrought from the bottom, they have to carry gobways; these gobways are apt to be shoved close together; and, if there is not some one to keep the ventilation right, of course the ventilation stops then, and the atmospheric air becomes mixed with damp and, in some cases, sulphur; and that is the cause of explosions.

5492. Are you liable to explosion in those ironstone mines?—Where the mine is in the whole they are more liable to sulphur than they are in broken mines; broken mines give damp instead of sulphur.

5493. Black damp, you mean?—Yes.

5494. Does the men's health suffer in your mine from want of ventilation?—Yes; it brings on asthma; that is the great complaint amongst colliers; it killed my father.

5495. Have you got viewers to see that the ventilation is attended to?—There is what we term a deputy; that is all we have.

5496. Do you use the safety-lamp now?—There are not many safety-lamps used in Staffordshire to work by; but where they think there is sulphur, the deputy goes in and examines the place, and brings a decisive answer as to whether it is fit for working or not.

5497. The accidents by burning are very rare; only the want of ventilation affects the health of the men; is that so?—Yes.

5498. Do you suffer much by falls of material?—We do; but not so much in the thin mines as they do in the thick; because they can more easily put props to keep up the roof in a thin mine.

5499. Have you known many accidents from falls of material in the mine where you are working?—Not so many in the thin mines.

5500. Have you proper materials for propping provided?—Yes.

5501. There is no complaint to make on that score?—Not at all.

5502. Are they brought near to you?—Yes.

5503. Are you charged anything for them?—No.

5504. Have you anything to suggest as to a better protection against accidents?—I cannot say anything except that we ought to have better inspection.

5505. Do you ever see the inspector?—I have worked in the pit 21 years, and have never seen the inspector in my life.

5506. What do you think the inspector would do if he came down the mine?—If he came down and examined the workings, and did his duty, I think he would see that the place was properly ventilated, and would see if any place was short of props; so that he should see the pit before the accidents happened, and prevent their happening. As a general rule, when a fatal accident happens, the butty miner sends word to the inspector; the inspector sends word back to the butty miner that he will be there on such a day; and that place, before the inspector comes, is properly put together, so that when he comes it looks safe and well to the eye. Under those circumstances the inspector says that it is a pure accident; whereas, if he had been round the pit before, he could have seen the difficulty; but it is concluded that it is a pure accident by the inspector, and then he goes direct to the coroner. A lot of jurymen are called together, who may be shoemakers, tailors, grocers, bakers, and such like, men who know nothing whatever about a mine. The coroner has the decisive answer of the inspector, and the jury

jury have the decisive answer of the coroner, so that the dust is blown in all their eyes, and they cannot see the truth. The men who sit on the inquests know nothing about it; the coroner knows nothing about it, and the juror knows nothing about it, because it is all put right before the inspector gets there.

5507. During the 21 years that you have been there, how many fatal accidents should you say that you have known in that mine from falls of material?—I cannot say. I have heard of hundreds and thousands of accidents in my time.

5508. When was the last fatal accident from a fall of material in your colliery?—I think something about four months ago, it may be more. Ours is a very good colliery for material. I consider our colliery to be well defended, with very good material as regards machinery.

5509. And a good supply of props?—Yes.

5510. But there was an accident in it four months ago?—Yes; I think over four months ago.

5511. Whose fault was it?—I cannot possibly say.

5512. It might have been the fault of the man?—I cannot say.

5513. Accidents are very often results from the carelessness of the men, are not they?—Sometimes. Men often undertake work that they cannot do right, and therefore they drop into accidents.

5514. Mr. *Liddell.*] I understand you to say, that in the case of a fatal accident happening, and an inquest being held, the coroner is very much guided by the report that the inspector gives him of the state of the mine at the time?—Yes.

5515. That the evidence is heard by a parcel of people who know nothing whatever about the mine?—Yes.

5516. And that the coroner, being ignorant of the state of the mine, and the jurymen being ignorant of the state of the mine, the decision, in fact, rests upon the report of the inspector?—It does.

5517. That is your complaint?—Yes.

5518. Now you are a very intelligent man, and have given consideration to these things, how should you propose that the jury should be composed, in order to get a fair decision?—I think that if the jury were half miners, and half of other trades, that would be an improvement.

5519. Would you propose that the jury should be composed of men working at that time, in that particular mine, or would you have impartial men taken from a mine in the neighbourhood?—I should prefer men in the neighbourhood, because the men at the mine itself might be victimised by the master they worked for; and those men in the neighbourhood might understand the nature of the work just as well as those who worked in the pit where the accident happened.

5520. And do you not think that if they were men employed in the mine in which the accident had happened their feelings might overcome them, and that they might therefore be induced to be less impartial than they otherwise would be, by the state of feeling on the question in the mine itself?—I think myself that they would give way a little bit from their fear of being turned away.

5521. Mr. *Foster.*] Do you not consider that many accidents may arise from falls of coal, which cannot be foreseen?—Certainly.

5522. And also that accidents may arise from remissness on the part of the workmen themselves in not using the timber and materials provided for their safety, and from want of caution in their work?—That is often the case.

5523. Would any amount of inspection or any number of inspectors provide for such eventualities?—Not for those cases.

5524. Mr. *Greenall.*] You went to work at a very early period of your life, did you not?—Yes; as near as I can guess, I was about 10 when I went to work in the mine.

5525. You speak like a person of observation and thought and education; where have you been educated?—What little I do know I chiefly learnt within the last five years.

5526. At night schools?—No; I have studied a good deal by writing at home; I like writing, and I read a good deal also. It is reading and writing at home that has got me a little more educated than I was.

5527. Have you gone to any school at all?—I have not gone to any school, I think, for 20 years. About two years after I commenced work I went to a Sunday school.

5528. Mr. *Liddell.*] But you learnt to read and write before you were 10 years old, I suppose?—Yes; I went to school till I was 10 years old; but I did not get much at school.

5529. Have you never attended a night school?—I never attended a night school except for a very little while in my lifetime. When the boys get home from their work they have no inclination towards school. They get up about five o'clock in the morning, and they have to go down the pit at six o'clock; perhaps it takes them half an hour to walk to the pit. They have to be in the pit till six o'clock, and then they get home, and by the time that they have their tea it is near seven, and then perhaps their parents can hardly rouse them sufficiently to get them to bed.

5530. Mr. *Greenall.*] Then it comes to this, that the greater part of what you know you have learnt within the last five years?—I believe I have.

5531. Mr. *Foster.*] What remedy would you propose as to these defects with regard to education?—If I was to propose at all, I should propose that the boys should not work so many hours; that the remainder of their time should be spent in education, and that a scientific and competent teacher should teach the boys from the age of 12 to the age of 14; they will learn a good deal then, I think.

5532. What time do you think they should devote to school?—A boy should not descend a mine till he was 12 years old, and from 12 to 14 he should not have more than eight hours' work, and after the eight hours' work he should go to school for the remaining part of the day. I think that eight hours' work is quite sufficient for a boy, if he is to get any education at all.

5533. General *Dunne.*] I understand you to say, that when an accident occurred and was reported, some time elapsed between that report being made and the arrival of the inspector?—Yes.

5534. And that in the meantime the place where the accident had happened was so arranged that the inspector on his arrival could not judge of the state in which it had been at the time when the accident happened?—It so happens that the inspector when he is sent for, generally says that he shall come on such and such a day, and then the place is always made secure by the time he comes, so that when he sees the place it looks

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very well to the eye, and it looks as if the accident must have been a pure accident.

5535. Is not that entirely contrary to the law in such cases?—If the inspection was thoroughly done, the inspector ought to go down the mines before accidents. I consider the inspectors now to be something like the man who locked the door after the horse was stolen; after the man is dead, the inspector goes down the mine, and says that it is a pure accident; but if he were to go down twice or three times a month, and thoroughly investigate the collieries, I think many accidents would not happen that do happen now.

5536. But when an accident did happen, would it not be better to leave the place where it happened just in the state in which it was when it happened, till the inspector saw it?—Yes.

5537. At the inquests, men who could give the best information of the circumstances under which the accident happened do not give that information, as I understand you?—It is owing to the fact that they are afraid of losing their situations.

5538. Therefore in all cases of accidents there is considerable difficulty in getting at the true cause and circumstances of the accident?—Yes.

5539. And you would object to have on the jury six of the miners taken from the pit itself, for a similar reason?—Yes; I should prefer six in the neighbourhood.

5540. And you would associate with them what other class of men?—It would not matter what other class, provided that half were miners.

5541. And you would propose to have six of the miners, because you think that they would be able to judge better of the nature of the accident?—Yes, I think that if associated together they would be able to give a decisive answer on the question.

5542. Sir *Philip Egerton.*] I understood you to say that you had never seen the inspector; I suppose when you said "inspector," you meant "deputy"?—I was never working in a pit where there was a man killed, else I might have seen one, because the inspector never comes till a fatal accident happens, and then he sends word that he is coming, so that the place is put right before he comes.

5543. But I understood you to say that the man who was killed four months ago was one who was employed in the pit where you are working?—No, in the same colliery.

5544. *Chairman.*] How many pits are there in that colliery?—I should think about 30.

5545. General *Dunne.*] Are there deputy inspectors as well as inspectors?—No.

5546. You have never seen any inspector at all in the mine?—No.

5547. Sir *Philip Egerton.*] With reference to ventilation, I think you have stated that the ventilation in the mine where you work is for the most part natural ventilation?—Yes.

5548. When that ventilation is defective, who gives notice of that fact to the viewer?—The viewer has a deputy, and he knows all the while what is the matter.

5549. At whose discretion is the furnace lit?—It should be the deputy's duty to look after the ventilation.

5550. Whenever the deputy found the ventilation defective he should order the furnace to be lit, you mean?—He *should* do it.

5551. You complain that he does not?—I complain that the windway is not sufficient to carry the ventilation.

5552. When the furnace is not lit, and you trust to natural ventilation, do you find that that natural ventilation is interfered with by the state of the air, according as it is a hot day or a windy day?—Yes, according to what the air is on the bank we have it down the pit.

5553. What regulates the up-cast and the down-cast shaft. What regulates the current of air into one shaft and the exit by the other?—It often happens that the pit that is deeper than others has the best draught.

5554. Do you often find that the currents are reversed in certain states of the atmosphere; that the up-cast becomes down-cast, and the down-cast up-cast?—Sometimes, when it is very windy weather.

5555. Do you ever employ mechanical means, such as fans or blasts, for forcing the air into the workings?—Nothing, except fires.

5556. Then your complaint is that the furnace is not lit so often as it ought to be?—My complaint is, that the windways are not large enough and high enough for the air to pass through properly.

5557. *Chairman.*] Did I rightly understand you to say that, in the case of a fatal accident, the inspector has generally been to the mine before the inquest?—Yes.

5558. Between the death and the inquest?—Yes.

5559. Then there is considerable delay in the inquest, is not there?—It is often the case that when an accident happens the inspector goes the day after the accident, and sometimes the jury will sit in the afternoon, and sometimes on the second day, but the inspector always gives his decision in before the coroner.

5560. Do you suffer much from heat in the mine where you are working; is it very hot?—Sometimes; according to the weather on the top.

5561. Do you work with but little clothes on?—With everything off down to the waist.

5562. Is the butty system common in your mines?—Very common.

5563. How are you paid supposing you work under a butty?—We are paid by day-work and piece-work.

5564. When you are paid by piece-work you are paid by weight, are you not?—No; we have so much undergoing to do for so much money.

5565. So much material to cut out you mean?—Yes; there is a certain length for us to do for a day's work; that being done it is considered to be worth 3 *s.*

5566. When you are paid by the day, what do you get?—It is according to the men; some men are better than others, the best of men have about 4 *s.* 6 *d.* or 4 *s.* 3 *d.* a day.

5567. Is that when they work by the piece?—When they work by the day.

5568. How much can the best man get if he is working by the piece?—4 *s.* 6 *d.*; reckoning 3 *s.* a day, that would be a day and a half.

5569. What do you call a day's work; how many hours?—There are no hours attached to piece-work; day-work is 12 hours.

1570. But how much could a workman who was paid by the piece, earn in the 12 hours if he were a good workman?—A man might do a day and a half by five o'clock.

5571. That would still leave him an hour over?—Yes.

5572.—When a man is employed by the day, that is to say, for so many hours by the master, he gets 4 *s.* 6 *d*?—Yes, a good workman.

5573. Is

5573. Is there any complaint between the men and the butties, as to the mode of the payment?—No, I cannot say that there is much complaint in that respect.

5574. There is not difference of opinion, is there, as to the amount of work done?—That is often the case.

5575. What sort of difference of opinion is there, as to the amount of work done, between the butty and the men?—The men seem to think that they have too much to do for 3*s.*

5576. That is as to the amount of wages, but I mean, is there any question between the butty and the men as to the actual work that has been done. You have to cut so many yards for so much money; is there ever a question between you and the butty as to how many yards you have cut?—The butty has to say how much we shall do for 3*s.*

5577. Then it is a question of wages?—Yes.

5578. Then you have no complaint to make as to the mode of measuring?—What we say is, that if the butty system was abolished altogether it would be beneficial to the miner, as the money would come direct from the master to the miner.

5579. You object to the butty or middle-man system?—Yes.

5580. The men receive their wages from the butty, you say?—Yes.

5581. You are paid weekly, are you not?—Yes, in our country.

5582. Where are you paid?—On the pit top.

5583. Are you paid near a public house?—No.

5584. Are there public houses in the neighbourhood belonging to butties?—I think that system is nearly abolished in Bilston.

5585. To whom does the colliery you work in belong?—To Messrs. G. B. Thorneycroft and Company.

5586. The practice of butties keeping public houses is going out, I understand you to say?—It is being put down in Bilston.

5587. You have no complaint to make of being driven to the public-house?—Not in Bilston.

5588. You have worked there 20 years, have you not?—Not in one colliery.

5589. Have you had complaints to make on that score in other places where you have worked?—Yes.

5590. How long ago?—About three years ago I worked at a place under Mr. Philip Williams, called Coal-lane, between Willenhall and Bilston.

5591. How far is that from where you are working now?—A mile and a half or two miles.

5592. In that case did the butty keep a public house?—After we received our wages we had to give the butty back 6*d.*, and he gave us a piece of metal which was not coin, but which we were to take to the public house; he gave us the money first, but we had to give 6*d.* back to him, and then we would take this check that he had given us, and go to the place and receive a quart of ale for it.

5593. That was only on the pay day, was it not?—It was every week; the one week the draw, and the other week the reckoning.

5594. Once a-week you had to spend 6*d.* in beer at a public-house?—Yes.

5595. Did that public-house belong to any of the butties?—No; but the butty and the publican were intimate.

5596. They divided the profits, did they?—No.

5597. However, the butty and the publican went shares in some way or other?—They were interested in one another's welfare.

5598. Do you know whether that is going on still in that colliery where you were three years ago?—That colliery is finished.

5599. Do you know any places within your knowledge where the same abuse has prevailed?—I think it is almost abolished in Bilston now.

5600. Mr. *Foster.*] Would that system receive the sanction of the owner of the colliery?—I think that it was done unknown to the proprietor, because the butty was in a lowish condition, and he used to borrow money of the publican; therefore he did this by way of recompense, to force his men to have this drink, so that he should keep in tow with the publican, and still borrow money if he wanted it.

5601. You think that this arrangement was entirely between the butty and the publican, and not with the knowledge of the master of the colliery?—Just so.

5602. Mr. *Liddell.*] I understand that your objection to the butty system is this; the butty makes a profit upon the work done, does he not?—Yes.

5603. And you think that if there were no middle man in the case the amount of that profit would go into the pockets of the men?—Yes.

5604. What class of men are these butties?—They rise from working men, some of them.

5605. They have been working men themselves?—Yes, some time ago.

5606. Are they men past their work or disabled men, or what sort of men are they?—They are stout able men.

5607. Do they make a good thing of it generally?—They do.

5608. Then it is a popular employment that of a butty?—About the best in Staffordshire.

5609. Do you mean that there is a great disposition on the part of the men to become butties?—They do like to become butties.

5610. Because the profits of the business are so good?—Yes.

5611. Are they respected by the men?—In some cases; very few.

5612. Do the men think that the butties make more by them than they ought to make?—The men seem to think that by having these butties they are more oppressed, because the employer cannot pay the labour as he would do if there was no middle man.

5613. The butties and the employers get on very well together, do they not?—In some cases; the butties can generally get on.

5614. As to the butties and the men, do they get on pretty well together?—It is always the butty's study to go to try and press more work on a hard-working man, so that the two cannot get on well together.

5615. And you think that if the man were brought into contact with the employer he would be able to make easier terms for himself than he can with the butty?—I think he would, and the men would be far superior; I think the master would have more for his capital, and the men more for their labour.

5616. Am I right in supposing that the masters rather like the butty system?—I cannot see why they should do it, but still they keep them; I think they are blindfolded to a great extent, because there are places now going on very well where there are no butties; in the Mott Colliery, for instance, they started without the butty system, and, I believe, that if the butty system was abolished, the colliery would go on better, and that employer and employed would be on

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better terms with one another; but this middle man stops the way and prevents the working man from expressing his grievance to his master.

5617. Do I rightly understand you, that if you have a grievance in reference to ventilation, or any other part of the management of the colliery, you address your complaint to the butty, and not to the manager?—Just so.

5618. Mr. *Greenall.*] Your opinion is that the butty is no great benefit to the master, and that he is a disadvantage to the workman?—Yes.

5619. Do you work by day or by the job?—Just at this time I am under a contract; I work by the ton. It is iron-stone where I work, and I work by the measure. The stone is put on the bank by the measure, and I work by that measure, and the butty pays us so much for every ton. The butty receives a certain sum of money from the master, so that it has to go through his hands before it gets to us.

5620. The butty makes a profit upon your labour, in fact?—Yes.

5621. What weekly wages do you get?—The sum varies; something over 1 *l.*, if I work a whole week; I may get 22 *s.* or 23 *s.*, if I work six days.

5622. Mr. *Liddell.*] You told us just now that a good man could make 4 *s.* 6 *d.* a-day, and you are a good-looking man, at all events; 4 *s.* 6 *d.* a-day would give more than 23 *s.* a-week?—But then, there is only half a day on Monday.

5623. Mr. *Greenall.*] How many hours in the week do you work for 20 *s.*?—If you reckon up 11 hours for five days and seven for Monday, that would be about it, it would be about 62 hours in the week; that would would be pretty long, I should consider.

5624. General *Dunne.*] Will a butty take a whole colliery, or are there several in one colliery?—One butty will generally look after one pit; but it is the case, sometimes, that they will have two places.

5625. They must have some capital in order to pay the men, must they not?—I have known them start with a small pit company, and then there is not much expense.

5626. Do the masters supply them with the pay?—In every case, I believe.

5627. Therefore, their profit is the difference between the pay that is paid to the workmen and what they charge the masters?—Just so.

5628. They do it by contract?—Yes; they contract for so much a ton, and we have to work by the yard.

5629. And you object to that system?—Yes.

5630. How do you suppose that it could be prevented by legislative enactment?—That is a hard matter; I do not know that I could thoroughly go into that question.

5631. Mr. *Foster.*] You are aware, I suppose, that the legislature could not more readily stop work being done in a mine by contract, than it could stop making a railway, or driving a tunnel, or doing any public work by contract?—I admit that I cannot see my way clear in that respect.

5632. *Chairman.*] If the work was not done by means of butties the master would have to employ men to measure the work besides those whom he employs, now would he not?—He would have to employ an overlooker for every pit, and they would work by the ton.

5633. You have taken a contract under a butty yourself, have you not?—Yes.

5634. Then you are a sort of butty yourself?—A very poor one.

5635. Do you employ any workmen under you?—No; we work all together.

5636. Then several of you have taken the contract?—Yes; the pit company all together.

5637. Are there any differences between you and the butty as to the weight of what is done?—We have ours by the measure on the bank; and he has his by the measure; he has the overplus to himself.

5638. He gets more, then, than you are paid for it?—Yes.

5639. Is there any difference of opinion between you on that point, or is it understood that it will be so?—It is thoroughly understood by us.

5640. It must be a matter of arrangement between you and the butty?—Yes.

5641. It is part of the understanding that you send a little overweight?—Yes.

5642. The butties do not come and do a little work themselves, do they?—Very little work they will do; they are too fat to work.

5643. Is there any other point on which you wish to give evidence?—I cannot say that there is anything else.

5644. General *Dunne.*] You never have the material weighed, you say?—No.

5645. *Chairman.*] Are the boys at all employed at the pit's mouth under 12 years of age?—In some instances there are boys, but very few on the pit top; they are generally underneath.

5646. What sort of work do they do on the pit top?—I cannot see many things for them to do on the top.

5647. Supposing the boys were not allowed to go down the pit before they were 12 years of age, what do you suppose they would do?—A boy cannot do much at anything before he is 12 years old.

5648. You would wish them kept at school till they were 12 years of age?—Yes, I should approve of that.

5649. Mr. *Foster.*] Do you think that the parents generally in Staffordshire would be satisfied to keep their boys unemployed, and to send them to school up to 12?—I think it would be an advantage to the community at large.

5650. But do you think that it would work?—Yes, I think so, because they would not be kept in ignorance.

5651. I quite agree in the advantage of that; but do you think that that would really be the effect of keeping the boys out of the pit?—I have no doubt some would object to it, but I believe the country at large would approve of keeping them off the pit till they were 12 years of age; it is but little they can do then.

5652. *Chairman.*] Have you ever worked in any iron-stone mines out of the coal measures?—No; I have always worked where there is coal and stone in one shaft.

5653. Have you ever worked in lime-stone mines?—No.

5654. Mr. *Foster.*] Have you ever worked in thick coal?—No.

5655. Mr. *Liddell.*] Are you paid weekly or fortnightly?—Weekly.

5656. *Chairman.*] Have you anything to say as to the making of special rules?—I cannot attempt to speak on these special rules now.

5657. I do not mean as to any particular special rules being right or wrong, but as to the way in which they are made?—I should leave that entirely in the hands of the Committee.

Thursday, 10*th May* 1866.

MEMBERS PRESENT:

Mr. Clive.	Mr. Greenall.
Sir Philip Egerton.	Mr. Liddell.
Mr. Fawcett.	Mr. Neate.
Mr. William Orme Foster.	Mr. Woods.

CHARLES NEATE, Esq., in the Chair.

Mr. Enoch Onions, called in; and Examined.

5658. *Chairman.*] Where do you come from?—From St. George's, near Wellington.

5659. What are you?—I am a Miner.

5660. Are you working in a mine now?—No.

5661. How long have you worked in a mine?—For 25 years in all.

5662. How long have you left off working in a mine?—Two years ago.

5663. You were not summoned as a witness, were you?—No, I was not.

5664. Do you know who it was that was summoned?—Edward Beard, of Snedshill, near Wellington.

5665. Did you see him after he received the summons?—I saw the summons, and brought it with me.

5666. What did he say about the summons?—He said that he durst not attend.

5667. Why did he say that he durst not attend?—He said that he had a wife and family depending upon him, and he knew full well that if he attended this Committee, and gave evidence here, he would be discharged.

5668. So you came as a volunteer?—Yes.

5669. You have ceased working in mines for two years, you say; what mines did you work in when you did work as a miner?—I worked in the coal mines, and the stone mines.

5670. What coal mines especially?—The flint coal, we term it.

5671. Whose colliery was that?—The Lilleshall Company are the proprietors.

5672. Did you work for any other company except the Lilleshall Company?—I worked for the Lilleshall Company mostly. I commenced working for them, and I continued it. I was in North Wales for a while.

5673. Can you tell the Committee why you ceased working for them?—They discharged me; for what I cannot tell. I asked the master, the man that stands No. 1, as we term it, how it was that he discharged me, and he would not tell me.

5674. Had you taken an active part in unions?—Yes, I had; I had stood by the working men.

5675. And did you suppose, in your own mind, that that was the reason for your being discharged?—I did not know anything else; I always attended to my work regularly.

5676. Were there many boys employed in those mines where you worked?—A great many boys.

5677. How many boys under 14 years of age were employed to 100 men?—I should say five or six to 100.

5678. No more than that?—I think not any more.

5679. Of those, how many would be under 12 years of age?—Perhaps half of them.

5680. How do you know that there would be half of them under 12?—I have seen them, and spoken to them, and asked them their ages, many of them; and I have found that they were not 12 years of age when they commenced working in the mine.

5681. How long ago was it that you met with such a case?—I saw one this week that was but 10 years of age when he commenced working in the mine.

5682. Could he read, do you know?—He could read a little, and write.

5683. Have you known them employed under 12 without being able to read and write?—I cannot say.

5684. How many hours do they work?—I may say, safely, that most of the boys are down 12½ hours.

5685. At what time do they go down?—About half-past five in the morning.

5686. And stay till six in the evening?—Yes; they are not up at six o'clock in the coal mines, especially.

5687. What do the boys work at?—Some of the younger ones I have seen attend to doors; some of them help the loaders in what we term pitching round the draught.

5688. Is that hard work?—I thought it was when I was a boy, and attended to it myself.

5689. Is the coal cut in large lumps?—Yes, it comes down in large lumps, but there are men that break up the coal into nice lumps.

5690. The boys are helping the loaders, by putting in the smaller lumps, I suppose?—Yes, and placing the coal round.

5691. To make the draught hold as much as it can?—Yes.

5692. That is hard work, you say?—Yes.

5693. Have you seen the boys tired and much exhausted after their work?—They are quite exhausted after so many hours' work.

5694. Do they ever go to school when they come up?—I never heard of any doing so unless they get towards 16; then they see how remiss they are in schooling, and try to apply themselves to it.

5695. The younger boys do not go to school, I understand you?—When they come home, and get a little refreshment, they are soon asleep.

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5696. What do they get for wages?—They commence at 6*d.* a day.

5697. What do they get from 12 to 14?—1*s.* 6*d.*, some of them.

5698. What is your idea of the longest number of hours that boys should be allowed to work?—If they can read and write they commence to work in the mines; yet working so many hours, and their strength being exhausted, they will soon forget what they have learned previously to their going down the pit. I think that they ought to have the privilege of schooling, and they cannot have that privilege if they work so many hours. Eight hours is plenty for them to be down in the pit.

5699. Have you many women upon the pit's bank there?—A great many women.

5700. What should you say is the proportion of women to men?—There would be eight young women and girls upon some pit banks.

5701. Are there any other women employed besides the young girls?—There are women that manage at the pit head; they take away the full draughts and send down the empty ones. I am speaking now in reference to stone mines chiefly.

5702. Will you speak rather about coal mines, and when there is a difference, mention it; the women, you say, work more at the stone mines?—Yes; but they work at the coal as well.

5703. At the coal mines, what is the work that the women do at the pit's mouth?—They take young women at the coal mines.

5704. Do they work at night at all?—Yes, a great many, and a good many of those are married women.

5705. It is more the married women that work at night, is it?—Yes.

5706. What work do the women do at night in that district?—At night the shafts are repaired chiefly, and these women attend at the pit head, and part of their work is to hearken to what the men say in the shaft. If they send any full draught up, the women take it away and send them down an empty one.

5707. Is there a manager to see after them at night, when they are there?—Sometimes, not always.

5708. Do you think that the practice of the women being there at night leads to mischief?—It has done so in more instances than one, I know.

5709. You think that there is improper intercourse?—Yes, the married men get with the young women; they have done so.

5710. Not very much, I suppose?—I have known many cases.

5711. What is the feeling of the working men generally, as to the women being employed on the pit's bank?—Those that I consider to be the thinking men, belonging to the mines, abominably hate it.

5712. And a great many do not, I suppose?—A good many do not take notice of that, or of anything else, as they ought to do.

5713. What is your opinion on that subject?—My opinion is similar to the opinion of a man employed upon the line, that I know, who is a very decent man; he said that they would make him blush, at times when they passed by, and he thought it was a shame for them to be employed in such a way.

5714. Mr. *Liddell.*] As far as you know, the Act of 1860 has been complied with in respect to the non-employment of boys under 12 years old, unless they can read or write?—By the Act they were not to go till they were 10.

5715. The Act says that they are not to be employed at all below the age of 10, but that if they are employed between the ages of 10 and 12 they must give a certificate that they can read and write?—The certificates are very scarce in collieries that I am acquainted with, and I do not think you would find one certificate if you searched the collieries throughout Shropshire.

5716. Is it within your knowledge that boys are employed between the ages of 10 and 12, who cannot read and write?—No, I do not think there are any, because there are such facilities now round about our district for learning to read and write.

5717. You do not give the masters any credit, then, for not employing boys who cannot read and write, but you think it is merely the habit of the age that the boys should be taught?—Yes.

5718. Do you think that the Act of 1860 has had nothing to do with preventing masters from employing untaught children at that age?—I do not think that they have employed boys under 10 years of age since the Act was passed.

5719. I want to know whether you think that the masters have paid no attention to the Act, as regards the employment of boys between the ages of 10 and 12, who cannot read and write?—They have paid some attention to it.

5720. You say that thinking men hate this employment of women on the pit bank, and it is very natural perhaps that they should; but do you not know any thinking men who allow their wives and daughters to work upon the pit bank?—Not what I should call thinking men.

5721. I mean sensible, reasonable men?—Very few.

5722. But you know some who do?—I do not think that I can mention any.

5723. Are you quite sure?—I cannot name one that I would call a thinking man who does so.

5724. I want to know, if public opinion (because that is what it comes to) is so strong against the employment of women in these hard occupations, what is to prevent the men from forbidding their wives and daughters to do the work, without coming to Parliament to ask for legislation to prevent it?—I can hardly say.

5725. Is there nothing in your idea that is rather degrading in an independent man coming to ask Parliament to legislate for that which he can do for himself?—We are asking it for the benefit of our fellow men. I should not allow my wife nor one of my daughters to go on the pit bank.

5726. And no man who thinks as you do would allow it?—I do not think he would.

5727. Then you are only seeking for legislation to restrain the cupidity of other men who are less intelligent than yourselves?—I think that is somewhat to the point.

5728. Is not that the case?—Yes; we are caring for those who do not seem to care for themselves.

5729. Supposing that the women were prohibited by law from taking this work, is there no danger that they would go into the fields, and do some other work of that kind?—They cannot do work of that kind in the fields.

5730. Have you ever seen a woman employed in filling a dung-cart?—No, I never have, that I know of; I have seen her pick a piece of ground and clean the stones out.

5731. Do not you think, that if a woman is employed

employed for 12 hours in a reaping field, on a hot day in August, that is hard work not fit for a woman?—I never saw a woman reap.

5732. Then, you do not think that if these women were prohibited by law (because that is what you ask for) from working on the pit bank, they would seek other employments, equally hard, in the fields or factories, or elsewhere?—I think they would seek for employment in service; that is my opinion about it.

5733. Mr. *Greenall.*] What is your present employment?—Since I have been discharged I have become a grocer, and am now employed in a shop.

5734. Are you living in the neighbourhood of the collieries where you worked?—Yes, I am surrounded by them.

5735. It is two years, you say, since you worked in the collieries?—It is two years since I worked in the pit.

5736. What you said just now had reference to the state of things when you worked in the collieries two years ago?—From what I understand now (and I come in contact with miners every day), it is somewhere about the same still.

5737. What you described was the state of things in the collieries when you worked there?—Do you mean as to boys?

5738. I refer to the whole of your evidence; you have told us of the existence of certain things; I suppose you mean that those things were in existence when you worked in the collieries?—Yes, those things which I have stated.

5739. Do you know, of your own knowledge, that the same things exist now in the mines where you worked then?—Yes, in many respects.

5740. How do you know it?—I know it from hearsay; I cannot go any further than that, because I have not been down the pit lately.

5741. Then, your evidence bears upon the knowledge which you had of the state of things two years ago?—The greatest part of it does; but as to the girls I can see them daily.

5742. Mr. *Foster.*] Who told you that Beard was afraid to come to give evidence?—He himself; I heard it from his own mouth.

5743. For whom does he work?—He works under the Lilleshall Company, or rather he works under one that is employed under the Lilleshall Company.

5744. At what pit?—We term it the Tarree pit.

5745. What have you been doing for the two years since you discontinued working in the colliery?—I took to a shop when I was discharged, in St. George's.

5746. How long did you work in Shropshire?—Somewhere about 25 years, as I have stated already. I began when I was very young, and I have worked there almost all my lifetime, with the exception of the last two years.

5747. How many days a week, on the average, do you consider the pits to work in Shropshire?—The coal work is five days, I think, on the average; sometimes six.

5748. Do you think that there is more immorality amongst the women employed in Shropshire about the pit's mouth than there is amongst, say, even the class of women employed in domestic service?—To the best of my knowledge, there is.

5749. Do you think that there is more immorality amongst the pit girls in Shropshire than there is amongst the girls employed at Coalport in the china works there?—I cannot say. I am four miles or more from Coalport, and I cannot tell what immorality there is among the girls at Coalport.

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5750. Although you are particularly acquainted with the state of morality amongst the girls employed on the pit's mouth?—I have been amongst them all my life.

5751. Is not Coalport a very important manufactory in Shropshire?—Yes.

5752. Do you mean to say that you have worked for 25 years within four miles of Coalport, and yet do not know the state of the female population employed in the Coalport factory?—Not the immorality of it.

5753. You have never heard anything about it?—No.

5754. Sir *Philip Egerton.*] Are horses employed underground in the pits in which you worked?—Yes.

5755. Who drive the horses?—The larger boys.

5756. Over 14 years of age?—Yes, they would be over 14; they could not manage a horse under that age.

5757. Are the tramways in your mine tolerably level, or are they on inclines mostly?—A great many of them are level.

5758. Then you employ no machinery in drawing the waggons?—Only in drawing them from the bottom to the top of the pit.

5759. You do not jenny at all, then?—I suppose that the mines in Shropshire are more level than in almost any country besides. I have seen some quite level; as level almost as this table.

5760. As I understand you, the only operation in which boys under 14 years of age are employed is in attending to the doors, and filling the waggons?—Helping the loaders, and sometimes cleaning the dirt off the rails.

5761. What description of work are the girls put to on the bank?—The younger girls are put to pick out the stone from the dirt in the stone mines.

5762. In the coal mines, what do they do?—They take the draught as it comes from the pit, and empty the coal from the draught into the waggons.

5763. How do they take it; is it moved along a tram?—Yes, at some pits; and at some pits there is a horse upon the bank to draw it to the waggons, and then the girls empty it.

5764. That is in the coal mines; now, in the stone mines, what do the girls do?—The material generally comes up mixed out of the pit, and the girls, when it is turned over on the mount, pick out the stone, and put it up on the pit bank, so that it may be measured.

5765. Is that hard work?—I consider it very hard work.

5766. How many hours in the day are they at work of this sort?—They work on the pit bank about 11½ hours.

5767. Is that very dirty work?—Not so dirty when it is quite fine and there is no rain, but when it is raining they are bemired with dirt and smudge, so that you could hardly know them.

5768. What description of dress do they wear?—They are dressed in frocks and petticoats in our part of the country.

5769. It is a decent style of dress, then?—Yes, they have what we term leggings, in order to keep their feet and stockings dry.

5770. They do not wear trousers like men?—No, not in our district.

5771. What wages do the girls earn?—The

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little ones earn about 6*d.* a day, and rise up to the highest, 1 *s.* 2 *d.*

5772. Do the married women get higher wages than the girls?—No, they only get 1 *s.* 2 *d.*, and these women must take the stuff from the pit head to what we call the mount's end; as the frame is raised, the mount is raised, and they turn it down the mount, so that it may be put out more easily.

5773. The work that the women do is harder work than the girls do, is it?—Yes.

5774. And they get about 1 *s.* 2 *d.* a day, you say?—Yes.

5775. *Chairman.*] At what age do girls begin to be employed on the bank?—There is not much respect paid to age so long as they can carry a box of stone.

5776. What is the earliest age at which they begin?—Some of them commence at seven or eight years.

5777. They have girls at the pit's mouth of seven or eight years of age, have they?—Yes, at this mount's end, to pick the stone out.

5778. How near to the pit's mouth where you used to work, do you live now?—I live close by the pits.

5779. You live quite in the midst of the old population?—I am surrounded with pits.

5780. You are surrounded by the people whom you used to know when you worked yourself?—Yes.

5781. I believe on Sundays you preach, do you not?—Yes, I am a local preacher on the Sunday, belonging to the Methodist body.

5782. Mr. *Liddell.*] Do you hold to your statement positively, that you never heard of a woman reaping?—Yes, I never saw one reaping.

5783. Did you never hear of it?—Not to my knowledge.

5784. Do you mean to say that you have never heard of women in large manufacturing towns going out in troops to assist at harvest work?—Not in reaping.

5785. Do you know what I mean by reaping, cutting corn?—Yes, taking a sickle and cutting it, I suppose.

5786. And you never even heard that women were engaged in England largely in reaping?—No.

5787. Did you never hear that some women actually take service even upon the understanding that they shall be allowed to go out to reap?—No, I never did; it is quite news to me.

5788. *Chairman.*] When you have been in the mines, have you paid attention to the ventilation of the mines, so as to notice whether it has been sufficient or not?—Yes.

5789. Have you often had to complain of insufficient ventilation?—I have worked in a pit when there was no air in it. I went to the mouth of the wind-way, and I could not put my hand in it; that is to say, there was not room for my hand to go in the wind-way, where the air ought to come.

5790. What is it that you have to contend with in your mines; it is not inflammable gas, is it?—In some parts, but now it is more rare than it has been perhaps in former times. We are now in the deep mines.

5791. It is not an explosive gas that you have to contend with, except in some mines?—In some mines only.

5792. The difficulty in these mines is the black damp, is it not?—Yes, mostly, now.

5793. You have two sorts of mines, some deeper than others?—Yes.

5794. What do you call a deep mine?—About 270 yards.

5795. And a shallow mine would be about what?—Fifty yards.

5796. The ventilation is best in the deep mines, is it not?—Yes.

5797. In the deep mines that you have known, is the ventilation satisfactory?—I believe it is now, under the Lilleshall Company. I have heard the men at this present time say that they have scarcely anything to complain of in reference to the ventilation.

5758. Have they got double shafts in all the collieries?—Yes, in these deep mines.

5799. Do they work the ventilation by a furnace?—There is not much necessity for that.

5800. But where there is necessity is that the practice?—Where there is necessity they use the furnace.

5801. Is the ventilation bad in stone mines or in coal mines?—It is about equal in the two.

5802. In the shallow mines there is not the same care taken of ventilation, is there, as in the deep mines?—They tell me that it is very bad, some of the shallow mines.

5803. How do they find out the presence of gas there?—The candles will not burn.

5084. Do you mean that the workmen commonly work in a place where the candle will not burn upright?—They must if they are to work at all.

5805. If the candle were upright it would go out, would it?—It would go out entirely.

5806. How do they carry the candle in such a place?—(*The Witness described it to the Committee.*)

5807. Do you mean to say that it is a common thing for the workmen in those mines to work with the candle in a horizontal position?—Yes, just enough to keep it burning.

5808. Have you observed bad consequences to the health of the workmen from their working in that way?—Yes, very bad.

5809. What is the consequence of their working in such places?—A man of 40 or 45, after working in that damp, is so affected in his system that he is almost off his work.

5810. Is there nothing done for the ventilation of these shallow mines?—I have not heard of anything being done; I know that sometimes last year, in the summer days, when it was towards July, the men were compelled to play because they had no air to go on; the candle would not burn in any form.

5811. The ventilation was so defective that they were obliged to give up the working of the mine, you mean?—Yes.

5812. Did they give up the working of the mine for any length of time?—Till there came a little colder weather, which caused a little more draught in the mine.

5813. Are you speaking of one particular mine, or of different mines?—It would affect both the coal and the stone in the shallow work.

5814. But have you any one particular mine in your eye?—No, I have not; that is not under the Lilleshall Company. There are seven different collieries in the Shropshire district.

5815. Have you ever seen workmen, or have you ever worked yourself, with a candle in that way (*describing the same*)?—Not very recently where I have worked. This is from hearsay.

5816. When

5816. When the working of the mine has been interrupted, as you describe, has it been that the workmen have refused to work in it, or that the masters have chosen of their own accord to put off the work till the weather has been better?—The men have told me themselves that they could not work in it.

5817. How long have you known the working of any mine interrupted from deficient ventilation?—For several days in that part which I am referring to now.

5818. Is there no provision at all made for the ventilation of these shallow mines?—I cannot hear of any provision being made, not for the better.

5819. Are they mines with only one shaft?—There are shafts, but they are at a distance from each other.

5820. There is a communication between the two, I suppose?—Yes, but it must be a good lengthy one, and not in good repair.

5821. You have known, you say, cases where you have tried to put your hand into what they call the air-way and could not get your hand in?—Yes, that was two years ago; but I have already said that in this deep work the ventilation is now good.

5822. Have they not an air-way in these shallow mines at all?—Yes, I believe they have an air-way, but I consider that it must be roundabout.

5823. It is very defective, you think?—It must be very defective.

5824. You have rarely explosions in those mines?—No, they do not explode.

5825. Have you many accidents from falls of material there—falls of roofs?—I think that those are prevented now, in a great measure, more than they were formerly.

5826. What is the last accident that you remember in this district?—I remember a boy being killed, dead upon the spot.

5827. How long ago was that?—About three months ago.

5828. Explain to the Committee, if you please, how that accident happened?—The accident occurred by a lump of stone dropping out of the shaft upon the boy's head, which killed him upon the spot.

5829. Accidents from falls of roofs are rare, are they not?—Yes; they have plenty of timber now; they are provided with it.

5830. You do not hear any complaint as to that. If accidents happen from falls of roofs, it must be chiefly the carelessness of the workman, must it not?—I believe it must, as far as I can see, now that they are provided with timber.

5831. That accident to which you have referred happened from a fall of stone, you say?—It was a kind of mixture of rock and stone; it was a piece of five or six pounds' weight, or perhaps more. I saw the piece upon the table, as I was upon the inquest. The person that was employed by the master to repair the shaft stated to the jury that a few days previous to the accident the shaft was in good repair. Upon his evidence, we gave in a verdict of accidental death. But what I wanted to say here was this, that I think it would be right for the place to stand as it is, after a person gets killed, until the inspector had seen it, and then for him to give evidence before the jury.

5832. Did the inspector attend upon this inquest?—No, he was not there.

5833. Did you yourself go and look at the shaft, as a juror?—I did not. The shaft was repaired; it had been attended to as soon as the boy was killed.

5834. The stone that fell was a bit of stone that was not covered by the lining of the shaft, I suppose?—It was lined with brick; at least, it appeared from the statement of the man employed to repair the shaft, that there were bricks underneath it and bricks above it; and this piece came out from between the bricks, so he stated.

5835. The shaft was imperfectly lined, then?—It was lined with brick, but it was imperfectly lined; it must have been so.

5836. How do you account for the stone being loosened or knocked out?—The jury thought that it was done when the draught was going up. They are iron baskets, and if the corner of an iron basket laid hold of that piece of rock, it would loosen it.

5837. The baskets are drawn up there by single chains, are they not?—By single chains. There are no conductors, or only in very few of our shafts. They swing up the shaft as they like. When this boy went at the bottom to lay hold of his empty basket to pull it in, this stone dropped upon his head and killed him. He did not speak afterwards.

5838. There was no scaffolding in the bottom of the mine, I suppose?—There was the open shaft at the bottom,

5839. Entirely open?—Entirely open, as they mostly are in our district.

5840. In a properly regulated shaft there would have been a scaffolding to protect the boy, would there not?—Where there are conductors, I believe it is so; there is a bonnet which comes over the draught upon the cage, and it is also protected at the bottom, so that the hooker-on need not go into the open shaft at all, to do his work. But this shaft, which I am speaking of now, was open.

5841. And that is the practice in this district to work with single chains and an open shaft without conductors?—Yes.

5842. Have you known accidents happen from the breaking of the chain?—Yes; I knew one, but it was five years ago.

5843. Do you know the particulars of it?—I cannot state the particulars of it, but there was great dissatisfaction among the miners in reference to the chain that broke. Some said that the engineer had been to the master to state that the chain was defective.

5844. Will you ascertain the date of that inquest?—Yes.

5845. All that you can say was that there was great dissatisfaction among the workmen at the verdict in that case?—Yes, there were several men and some boys (five in number altogether) killed, and they brought it in accidental death.

5846. And there was great dissatisfaction with that verdict?—There was great dissatisfaction among the miners at that time.

5847. Are there any other accidents that you could mention?—I cannot mention any more accidents at the present time.

5848. Mr. *Fawcett.*] You say, that in July last, one or two mines in your neighbourhood were obliged to be suspended because of the bad ventilation. What was the name of the mine that was suspended on that occasion?—It was under the Ketley Company.

5849. Do the men who work in these badly ventilated mines get high wages to induce them to work in them?—I think that the wages in those badly ventilated mines are lower.

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5850. Then how can they get men to work in them if the wages are lower, and the men suffer from the bad ventilation?—It is because the men are living round about the pit, and some of the pits, perhaps, where there would be better ventilation, lie at a distance from them; and, therefore, they choose to work round about their homes.

5851. So that, in fact, the men do not take the trouble to go a little further, and get into good ventilation?—And perhaps they could not all be employed at these other mines.

5852. If all of them tried to get into the well ventilated mines, the masters would be obliged to pay more at the badly ventilated mines, I presume, to induce men to work in them. But as a matter of fact, the wages are not higher, you say, in the badly ventilated mines?—No, they are not higher.

5853. Mr. *Liddell.*] In reference to this mine which was laid off work last July, is it in your neighbourhood?—It is near to where I live.

5854. How far off?—It would be two miles.

5855. Then you know of your own knowledge, do you, that they suspended work there last July on account of bad ventilation?—The men told me themselves that they could not work in the mine for want of air for the candle to burn in.

5856. Do you know whether the inspector was sent for under those circumstances?—I do not believe he was.

5857. What was the result of the suspension of the work?—It is not fire damp there.

5858. I am aware of that; it is what you call black damp?—Yes.

5859. I want to know how it all ended. I presume the master lost money by the suspension of the working of the mine?—No doubt.

5860. Was the mine put into a good state again?—It is not in a good state at present from what I have heard.

5861. Have the men returned to their work?—They returned to their work as soon as they could get the candle to burn.

5862. What is the name of the master?—Mr. John Williams would be one of the masters, the proprietor.

5863. Who is the head managing man?—Mr. Williams. He employs men under him called charter masters or butties. That system is carried on in our district.

5864. You have said that the ventilation is best in the deep mines. Am I not right in supposing that in the deep mines you are liable to the fire damp, and that in the shallow mines you are liable to the choke damp, or, as you call it, the black damp?—Yes.

5865. Then why is the ventilation best in the deep mines?—If they did not keep good ventilation in the deep mines they would have an explosion.

5866. Therefore, you would say that where there is not a risk of loss of life and explosion, you think that the owners and managers are more careless in regard to a complete system of ventilation, because there is no immediate danger?—I feel sure on that point; it has been so hitherto from my own knowledge, and what others have told me.

5867. Is there any greater difficulty in producing a sufficient current of air in the shallow mines than there is in the deep mines?—The pits in the shallow mines are so arranged, in the sinking of them, that it is not so easy to produce a good ventilation as it is in the deep mines. In the deep mines now in our place, there are two pits sunk within five yards, perhaps, of each other; but in these shallow mines they are, perhaps, 300 or 400 yards distant.

5868. What do you call a shallow mine; what is the ordinary depth of a shallow mine?—Fifty yards.

5869. You have said that when this poor boy was killed, you were on the inquest?—Yes.

5870. Were you out of work at that time?—I was employed in the same way as I am now.

5871. You were employed not as a miner, but as a tradesman?—Yes.

5872. Is that the usual constitution of the coroner's juries in your county; are they chiefly composed of tradesmen?—They were not all tradesmen on that inquest that I was upon.

5873. Will you tell us what the other 11 jurymen were; can you remember?—No, I cannot as to all of them.

5874. Were they most of them tradesmen?—Yes, the greater part of them, I think, were publicans, and shoemakers, and shopkeepers, and a few butties.

5875. Were there any working miners upon the jury?—I do not think there was one.

5876. Do you think that a jury composed of shoemakers, and tailors, and grocers, is a proper jury for enquiring into accidents in mines?—I cannot say that it is; how can it be?

5877. And you say that, because you do not think that those men are competent to understand the questions that are brought before them?—They cannot understand them.

5878. You had the advantage in that case, when you were on the jury, that you brought your experience to bear upon that investigation, and it was very probably useful to the jury; did it often occur, in the course of that enquiry, that you had to put the rest of the jury right on certain points which arose during the examination, and that, in that way, your mining experience was very useful to you and your fellow jurymen?—Of course, I spoke as my experience would assist me.

5879. And therefore, as I understand, your experience derived upon that inquest, confirms you in the belief that it would be well to have men of experience in the working of mines upon these juries?—Yes, certainly.

5880. Mr. *Foster.*] What remedy would you suggest for the insufficiency of the air in these shallow mines?—I should suggest that they should be properly inspected. I have been employed 25 years in the mines, and I have never yet seen the inspector with my eyes; he has never visited a pit where I have been employed.

5881. Have the men working at these shallow mines ever made any remonstrance to the charter master, or to their employers, as to their being unable to follow their occupation for want of air in the mines?—They have told me that they have done so; I have heard it from their own lips.

5882. Has it not received attention?—Not the attention it demands.

5883. The inspector of mines, I suppose, has not been communicated with in reference to those mines?—I cannot say as to that, but he has not visited them to my knowledge.

5884. Are there many of these shallow pits where such things occur, or are they but a small proportion of the whole number?—Yes, there are a good many of them; they are nearer Wellington. I do think that the remedy would be in proper inspection, and if there was a proper opening

opening made, say four feet, as I believe it ought to be there would be air enough.

5885. Do you mean between the shafts?—Between the shafts, working with each other.

5886. With respect to the juries, would you have the working miners on the juries, taken from the same colliery in which the accident occurred?—I should not suggest that all on the jury should be working miners.

5887. Speaking of the proportion of working miners that you would have on every jury, would you have them taken from the same establishment in which the accident occurred, or from neighbouring mines?—I can hardly say as to that, because the miners are so afraid to speak. At the present time if there is anything wrong, they are bound down with fear, somehow, in the district where I live.

5888. Then you do not think that any good effect would be gained under such circumstances, but rather the reverse, if what you say is correct, by having working miners on the jury?—I should suggest that part of the jury should be experienced miners; but I think that tradesmen now are more likely to speak up, and if some of the jury were practical miners and experienced miners their experience would help these others to speak up in a way that the miners durst not now.

5889. You think, then, that the class from which juries are at present constituted are more independent, and can speak up better than even the working miners?—Yes, if they knew what to speak upon.

5890. You think that it is more from ignorance than from any favouritism towards the employers that they give unsatisfactory verdicts now?—In some instances I believe it is so; but some would not say much even if they knew what to say.

5891. Do you think that the working miners taken promiscuously from the mines in Shropshire, would be able to give an intelligent opinion upon the cause of any accidents in mines other than those in which they were working themselves?—Yes, some of the intelligent men that I could mention in those mines would.

5892. Would those be the exceptions, or would that apply to the generality?—Those would be the exceptions.

5893. Therefore, the number from which intelligent jurymen could be selected out of the mines, would be to some extent limited?—Yes. I should suggest that part of the jury should be taken out of the mines from intelligent miners, and the other part from tradesmen.

5894. You do not consider every man, merely because he happens to be a working miner, to be sufficiently intelligent to bring his mining experience, such as it is, to bear upon any question of that nature?—If I had to appoint a jury, I should not make choice only of those that work in the mines, to be on the jury. I should sooner take tradesmen, and have a few, say half, perhaps, working miners.

5895. How would you have such fit men got at, if I may use the expression?—There would be a difficulty at the present time, unless we took charter masters or butties, and they do not choose to speak out.

5896. The butties, you think, from their connection with the employers, would be somewhat partial jurymen?—I do not think that they are fit to be on the juries.

5897. And the working miners, who from their intelligence and knowledge of mining are fit, are generally limited in number, are they not?—Yes, they are limited.

5898. *Chairman.*] Has your attention been called to the general rules of the Act?—Not very much.

5899. Do you know what the rule about the signals from the bottom to the top of the shaft is?—I am given to understand that there ought to be a communication from the top to the bottom.

5900. A means of communication by signals?—Yes, by signals.

5901. Are you aware whether that rule is complied with in the district of which you are speaking?—I feel assured that it is complied with in a measure; but I also feel quite assured that it is not complied with altogether. I could take you now to more than one pit where everything to the eye would appear all right at the top; but if you were to go down below 20 yards you would find that the wire was nailed to the side.

5902. There is the appearance, you mean, of a signal wire, so that if the inspector went by at the top of the shaft he would suppose that there were proper signals?—Yes, everything looks right.

5903. But it is nailed 20 yards down, you say?—Yes.

5904. Have you known that of your own knowledge?—I have seen it.

5905. Are you sure that it was not left so only for a time, till it could be repaired?—It was permanent.

5906. In the case of the accident to the boy, was the signal all right in that shaft?—I do not know as to that shaft, whether there was any signal at all.

5907. Have you ever known of the signal being put right when the inspector was coming?—Yes; I was told the day before yesterday that a man was accidentally killed in a shaft. I suppose they thought the inspector would be coming, and they put the wire all the way down.

5908. And the wire in that case had only gone a little way down; is that what you mean?—Yes, previously.

5909. Mr. *Foster.*] Do you think that, in practice, there is any much better signal than the voice?—You cannot hear the voice in some shafts from the bottom to the top; you cannot hear it at all, make as loud a noise as you please, at the bottom; there must necessarily be a signal, and I think that a real signal is a better signal than the voice, which may be misunderstood. It is quite an impossibility for the wire to be taken down these shafts, and kept in its place; they are in such a condition that the first draught coming up would bring the wire with it.

5910. *Chairman.*] The wire would get broken or brought up, you mean?—Yes; but I believe that, with some expense, it might be so arranged that it would not.

5911. But it would be difficult, as I understand you, to put the wire without lining the shaft properly, and having conductors?—If the masters were to go to some little expense to take the wire a little in the shaft they might manage without conductors, because I have seen it done in that way.

5912. Mr. *Liddell.*] Is there any particular sort of signal that has occurred to your mind that you would recommend?—Not anything different from what we have in most places, or from what there is in many places in our district; a wire going

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going from the top to the bottom, and a knocker at the top.

5913. *Chairman.*] With reference to the 6th Rule: "Every working and pumping pit or shaft where the natural strata under ordinary circumstances are not safe, shall be securely cased or lined, or otherwise made secure," do you conceive that the shaft in this part of the country is safe under ordinary circumstances or not, or do you consider that the strata are of that nature that the shaft ought to be securely lined and cased?—It is lined or cased.

5914. But imperfectly cased, is it not?—It is cased, with the exception of rock, and that, in many of the shafts, is not cased.

5915. Was that the case in the instance of that accident which you have mentioned?—Yes, it must have been so.

5916. With the exception of rock, the shaft is cased with brick, is it, in those places?—Yes.

5917. Mr. *Greenall.*] You spoke of an instance which you yourself had seen of a signal wire nailed to the side of the shaft?—Yes.

5918. Do you know whether it was nailed there when it was first put up, or whether that wire had been broken?—Yes, it had been broken, I believe.

5919. *Chairman.*] The mode of work, for the workmen in this district, is by day, under charter, is it not?—Yes.

5920. What is the day's wage usually?—At the present time it is 3 *s.* 3 *d.* or 3 *s.* 6 *d.*, I believe, for the best men.

5921. For the best men with 12 hours' work, do you mean?—Yes, with 12 hours' work.

5922. So that there is no question of weight between the men and the butties?—I have nothing to say about that between the men and the butties.

5923. Do you hear of any complaints between the butties and the master as to weight?—Sometimes there are complaints between the butty and the master.

5924. However, that does not particularly concern the workmen. Have you any complaint to make of the truck system being adopted at all?—I have not.

5925. You call the butty men charter masters, do not you?—Yes.

5926. Do the charter masters keep public-houses at all?—Very few in our district; I think it is prohibited by most of the proprietors.

5927. So that there is no grievance of that sort?—The men do not complain of that.

5928. They are not driven to the gin-shop?—No; they have their money, and they can go and lay it out where they like.

5929. Are they paid once a week or once a fortnight?—Fortnightly.

5930. Is it on the Friday that they are paid?—On the Saturday.

5931. Do they take a whole day on the Monday to play?—After the pay Saturday it has been the custom in our district, more especially in the stone mines, to play half a day on the Monday, and half a day on the Tuesday.

5932. What do you call half a day?—They work six hours, and play the other half of the day.

5933. At what time do they begin on those play days?—At 6 o'clock, the usual time, and they leave off work at 12.

5934. And they do that on Monday and Tuesday, you say?—Yes, it has been a custom all my life-time in the stone mines, but in the coal mines they do not adopt that plan.

5935. Is there anything else which you wish to state to the Committee?—That which I should like to press upon the Committee is in reference to the inspection.

5936. You have stated that you think what is chiefly wanted is more inspection?—I do believe that when a person is killed, before anything is touched or any alteration is made about that place, the inspector ought to come and inspect it, so that he may see how it has happened, whether through neglect or otherwise. That has not been so hitherto. There have been great alterations made, I believe, in many cases, after a person has been killed.

5937. When you sat as a juryman, the inspector did not attend at that inquest, you say?—I never saw him.

5938. Was any reason given for his not coming?—No, I never heard any.

5939. Mr. *Greenall.*] You said that the wages were paid on the Saturday?—Yes.

5940. At what hour?—The charter masters, or butties, receive their money under the Lillieshall Company somewhere between 9 and 10 o'clock.

5941. I suppose that the men receive their wages from the butties very shortly after the butties have received the money?—At most of the pits as soon as they come up out of the pit the charter master, or butty, pays them at the pit head in the cabin.

5942. Is that in the evening of the Saturday?—They have half a day, sometimes, on the Saturday, and sometimes three parts of the day; they finish off at three o'clock when they have three parts of a day.

5943. At what hour is your shop usually closed on the Saturday at night?—On the Saturday at 10 o'clock.

5944. And at what hour on other nights?—Eight o'clock.

5945. Mr. *Liddell.*] Do you approve of the butty system?—I do not know how I can approve of it.

5946. Will you tell the Committee why you do not approve of it?—Because I think there seems to be a double pressure upon the poor man. The charter master, in some instances, seems to be pressed about the money—I mean in reference to his receiving it from the master; he receives so much per ton, and sometimes he is rather bound down in his price. And then he must come upon the working man, and bind him down a little.

5947. Do the butties take the master's side generally, if any dispute arises?—Yes, always.

5948. All men like to become butties, do not they?—It seems to me that there is a desire among the men to be butties, and I cannot see why they should not be all butties, and all share alike in that respect.

5949. They could not be all butties, because then there would be no middle-men, would there?—Why should they not become all butties; why should not the man that is a butty now become equal to his men, and all share and share alike.

5950. You mean to say that you would do away with all middle men, and have direct communication between the workman and his master?—Yes.

5951. That is what you mean by all becoming butties?—Yes.

5952. They could not, in that case, all make the same profits as the butties make now, could they?—It is not reasonable, I think, that they should all make the profits that he makes sometimes.

5953. Do

5953. Do not you think that the maintenance of the butty system arises in part from the fact, that the men are very glad to become butties themselves; is there not a strong desire on the part of the workmen to become butties?—Yes; I have said so.

5954. Do you think that the abolition of the butty system would be popular with the men?—I have already said that they have a desire to become butties, and I cannot see why it should not be.

5955. Nor can I; but I want to know, if that is so, why the butty system has not been abolished?—I cannot say why it has not been abolished.

5956. Do the masters like?—It appears so.

5957. Do all masters like it?—All that I have come in contact with.

5958. Mr. *Greenall.*] Do you consider that the butty benefits by the present system?—He gets the greatest profit, in some instances.

5959. And you think the system a bad one?—Yes; and the sooner it is abandoned the better.

5960. Mr. *Fawcett.*] How much does a butty ordinarily get in a week?—I cannot answer that question.

5961. Can you give us no estimate of his earnings?—No, I cannot; it is sometimes more, and sometimes less.

5962. Does he get twice as much as the men?—Sometimes; sometimes three times as much.

5963. On the average do you think that he gets twice as much as the men?—I cannot answer that question in the affirmative.

5964. Mr. *Foster.*] You have not tasted the sweets of buttyhood yourself, I suppose?—Yes, I have.

5965. Then you ought to be able to answer the question, ought you not?—I might have acted as butty to the present time, and not done well yet.

5966. Mr. *Fawcett.*] As you have been a butty yourself, cannot you give us an idea of what you earned when you were a butty, compared with what you earned when you were a working miner?—I lost money as a butty.

5967. Then the butty's position was worse for you?—Yes; it might not have been so if I had worked it differently from the way in which I did.

5968. Why was it worse for you; was it because you were not hard upon the men?—It was because I did not feed the man who was over me, and "kissing goes by favour," as the old proverb says.

5969. Mr. *Liddell.*] Will you explain to us exactly, the system under which you contract; how is the work done under the butties?—The butty takes it off the kind of proprietor at so much per ton.

5970. A certain amount of work at so much a ton?—I take a stone pit off the proprietor, we will suppose.

5971. For how long a period?—There is no time specified; I pay the money down for the horses and the timber, and all the tools, and then I work it at so much per ton, and pay the men day wages; that is to say, their regular field wages.

5972. Then, during the period of your contract, you are in fact a master?—A master over the men.

5973. Does the responsibility of the ventilation fall upon you?—I do not think that the law states that, does it?

5974. I did not know that there was a law regulating the butty system?—No; but there is one regulating the ventilation.

5975. The master undertakes the ventilation, I understand you?—Yes.

5976. But the butty works the pit, and finds timber and tools, and engages the men and pays the men?—Yes.

5977. Then the master, during the period of the contract, hands over all the working of the pit to the butty?—Yes.

5978. What is the usual length of time that this contract lasts?—There is no time specified when they agree.

5979. How long did you work as a butty in your pit?—I worked as a butty three or four years, and I was compelled to leave it.

5980. You make the best bargain that you can with the men, I suppose?—The butty makes the best bargain that he can with the master; he must pay the men their day wages.

5981. But he engages the men at the lowest price he can, of course?—He cannot alter that; the price is fixed; it is the field price.

5982. Is that fixed between the master and the butty at first?—That has been fixed for many years; it is the field price.

5983. Then how does the butty make his large profits?—Sometimes it turns out well. It is better stone or coal than he anticipated, and so he is enabled to get more stone or more coal with less labour than if it were very thinly sown, as we term it under ground; and so there is a profit; and sometimes, if he cannot make it pay in one way, he tries to make it pay in another.

5984. Mr. *Greenall.*] You failed in your prosperity as a butty because you did not "feed" some gentleman; whom do you speak of?—They are ground bailiffs, as I term them.

5985. Mr. *Woods.*] I suppose there is competition between butties, is there not, as to the rate at which the work shall be done; is it done by the ton?—Yes.

5986. I suppose there might be two or three butties wishing to agree with the owner of a colliery at the same time, so that the price paid by the butty is fixed by competition?—It appears to me that there is a price fixed for a certain coal. That coal must got at so much per ton, at a field price; or if it is stone, that stone must be got at a field price, which has been fixed a long while.

5987. But supposing that the butties were all to want more money, perhaps they would get it, would they not?—I cannot remember that a circumstance like that has happened.

5988. Sometimes the butties get less, I suppose, per ton than at other times; the rate in one year is less or more than in another?—As it goes further from the bottom they want the price raised, of course.

5989. I did not refer to that; but in different years the price varies; in fact, there is some competition among the butties for the work, is there not?—Not that I know of.

5990. The price of the day wages is fixed by competition, I suppose, amongst the men. The rate of wages is dependent on the competition amongst the men for the work?—They are fixed field wages. I consider that they are fixed.

5991. Has the rate never varied in your lifetime?—When there has been a rise.

5992. Then it was settled by competition, I suppose; by a strike, perhaps?—No, in our district it has never been settled by a strike.

5993. How has it been settled?—When the masters have had a rise upon the iron, or a fall upon the iron or upon the coal, they have thought

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that they could afford to give the men 3*d.* a day more, or that they must take 3*d.* a day off them.

5994. According to the market price, you mean?—Yes.

5995. Then I suppose the butty's wages are according to market price?—Yes.

5996. The butties make a profit out of their contract, you say?—Yes, generally.

5997. The butties, I suppose, are the cleverest men generally?—I do not think they are.

5998. You talk of the hours of work being 12 hours a day; how did you reckon those hours, because you afterwards said that there was a short day on Saturday, and a short day on Monday, and a short day on Tuesday?—Those will be half days.

5999. Then 12 hours is a whole day's work?—Yes.

6000. Is that 12 hours down in the pit, or how is it reckoned?—They commence at six, and leave off at six.

6001. Where are they when they leave off at six; are they up above?—No; they are still down.

6002. What hours are allowed for meals?—There are no hours allowed at all for meals; they eat their meals one with another.

6003. The butty looks after them; he is with them at their work, I suppose?—Sometimes; but he speaks to the engine-man, and tells him to go on with the engine.

6004. They can eat their meals, however?—They work for one another.

6005. But they eat their meals?—Sometimes, and sometimes they have not time to eat their meals. I state that as a fact. I would not state it here if I did not know it.

6006. Have you ever seen it?—Yes, I have seen it.

6007. I was going to ask you, if they had time to eat their meals, how much time they gave themselves?—They give themselves twenty minutes, while some men work for them.

6008. How many meals have they down in the pit?—Two meals.

6009. Do you mean to say that they actually labour 12 hours in the day?—Yes, I consider that they labour 12 hours in the day.

6010. Twelve hours' manual labour performed?—Yes; if they have 20 minutes for meal-time they must go and work that much harder to get the full day up.

6011. How many days in the week do they make those long hours?—About five days per week at the coals.

6012. But in the iron mines you said they had three half days?—Yes.

6013. Then there can only be three days when they work 12 hours a day each, because there are but six days in the week?—In the first week they leave off at 12 o'clock on the first two days, and then there are four full days afterwards in that week, and five full days in the following week, and one half day on the Saturday.

6014. You give it as your opinion to the Committee, do you that when the men work a full day they do 12 hours' manual labour?—Yes.

6015. Mr. *Foster.*] What constitutes a day's work; have you a stint for a day's work?—The men are paid by the time, except what we term holers, that is to say, those that hole under, and their work is measured by the yard, so many yards for a day's work.

6016. How many hours will it take one of them to do that day's work?—Sometimes it will take six hours to do it.

6017. And that is a full day for them?—Yes, they work for life and death.

6018. Sometimes a man may get a day and a half in the 12 hours at that work?—Yes, if he works all the 12 hours.

6019. Mr. *Clive.*] You said that when the price of iron went down, the masters took off 3*d.* from the men's wages?—Yes, or if 3*d.* was not enough, they would take off 6*d.*

6020. Do the men submit to that quietly?—Yes, they have done so hitherto.

6021. Always?—Yes, in our part of the country.

6022. Mr. *Foster.*] When you speak of the butty making a profit out of the men, I presume you mean, in stating that, to state no more than that any other contractor, say for a railway or any other public work, would make a profit out of it?—I suppose they are something alike.

6023. You do not mean by your remarks to make any accusation of any unfair advantage taken by a charter master over the men?—Not in many instances.

6024. It is merely the ordinary profit that any contractor has a right to expect a profit out of the labour of the men employed, as a recompense for the risk that he runs, and the capital he employs. You have spoken yourself of purchasing the horses, and purchasing the tools, and purchasing the timber, therefore, there must be a profit made to compensate the contractor for the interest of the capital which he employs, and for the risk which he runs in his adventure; I presume you did not mean the Committee to infer, that all these charter masters were making an unfair profit, or an illegitimate profit, out of the labour of the men they employ?—I think it would be better if the system were done away with.

6025. *Chairman.*] Did I rightly understand you to mean that the charter master bought the horses out and out?—Yes.

6026. Then he must be a man of some capital, I suppose?—Yes, sometimes.

6027. He must have 300 *l.* or 400 *l.* at least, I suppose?—No, sometimes in the case of small stock, it does not take more than 50 *l.*

6028. When you were a charter master how many men had you working under you?—About 12 or 14.

6029. Did you work yourself at the time?—Yes.

6030. The butties do not generally work, do they?—Some of them do not work, I am sure.

6031. How much did it cost you to take to that pit?—There were two of us in that case, and it cost us 60 *l.* together.

6032. Your chief point is, that you want more inspection, I understand?—More inspection; that is what I have come chiefly to give evidence about.

Monday, 14th May 1866.

MEMBERS PRESENT:

Mr. Bruce.
Mr. Clive.
General Dunné.
Sir Philip Egerton.
Mr. William Orme Foster.
Mr. Greenall.
Mr. Kinnaird.
Mr. Liddell.
Mr. Neate.
Mr. Powell.
Mr. Hussey Vivian.

CHARLES NEATE, Esq., in the Chair.

Mr. George Parker, called in; and Examined.

6033. *Chairman.*] What are you?—A coal miner.

6034. A working miner?—Yes.

6035. How long have you been a working miner?—A little more than 19 years.

6036. At what age did you begin?—I was a little over 10.

6037. Where have you worked?—I have worked at Sherburn; that is a little east of Durham.

6038. Have you worked all along in the county of Durham?—All along in the county of Durham; I was never out of the county of Durham, not even on a visit, till I came here.

6039. Where do you work now?—At Whitworth colliery.

6040. Whose colliery is that?—Richard Sharton Johnson and Thomas Ray are two of the owners.

6041. Is it a company?—There are three of them in partnership.

6042. How long have you worked there?—I have worked in that colliery a little over 13 years.

6043. Is that a deep colliery?—I think it is about 82 fathoms.

6044. Are there many boys employed in the district?—In the district that I come from, comprising about 26 collieries, there are, as near as I can bring together the numbers, 500 boys under 14 years of age.

6045. That is how many boys to every hundred men?—That is running a little over 20; 20 or 30 boys on the average; somewhere near that.

6046. You mean boys under 14?—Yes, boys under 14.

6047. Are there any boys under 12 years of age employed in the collieries?—There is only one at the colliery which I come from; I am informed that there are some at other collieries, but I cannot say the number; I think the case is very rare.

6048. Are certificates generally required when they are under 12 years of age?—Yes, the certificates are generally required.

6049. So that you have no complaint to make of the employing of boys, contrary to law, between the ages of 10 and 12?—No; not in particular.

6050. What work do the boys do?—The most of them keep trap-doors; others mind switches, that is to say, where the way changes into different branches, they attend to the switches.

6051. Do they do any heavy work?—There are some few that are a little over 12, who are set to assist the putters in the shoving of the tubs. Where it is too heavy for one cutter to continue working the whole of the day, a little boy is set with him to assist him to push the tubs.

6052. The mines which you are connected with are flat mines, are they not?—Yes.

6053. Do they use ponies at all, or horses?—In the most part of the collieries in the county of Durham, they use ponies and horses, but horses are not so much used now as they were a few years ago. The most of the pits, and particularly the large ones, have engine planes down them; there are some of them, the length of which is a mile and a half, and ranging up to two and between two and three miles.

6054. That helping to push the tubs, which you say is the work of some of the boys, is heavy work, is it?—That is heavy work.

6055. Have they to push the tubs any distance?—It is very seldom that they have the tubs to push further than 150 or 140 yards; sometimes not more than 80 yards; that is to say, up to the point where the horses come to take the tubs away. In some cases, they have not more than 40 yards to push the tubs.

6056. Have you noticed the boys much tired or exhausted with their work?—Some of them who are called the pony drivers, are sometimes very tired, but in general, in the locality in which I live, the boys are pretty easily worked.

6057. How long do they work?—They work on the average a little more than 12 hours, not including Saturday, which is a short day.

6058. At what time do they go down into the mine?—They go down in some of the mines in the district I am living in at half-past five o'clock; in other pits, they go down at half-past four; some go down at six at this season of the year.

6059. When do they come up?—It depends much on the distance they have to travel after they get into the mine. Some of them have more than two miles to travel, after they get into the mine, before they come to the place for the day's work, and those boys generally get up the pit again between six and seven o'clock.

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6060. And those who have not to go so far come out earlier, I suppose?—Those who have the furthest to come from where their work is, to the shaft, are the latest to get up the pit.

6061. But they leave off work earlier, I suppose, as a general rule?—No; that is not generally the case with us; in some places it is.

6062. How long should you say that the boys, on an average, were kept down in the pit?—I should say a little over 12 hours, on the average; that is not including Saturday; Saturdays, as I said before, are short days.

6063. What time do they come out on Saturday?—There is a difference in collieries in that respect, and it much depends on the men giving over. The boys, in some of the collieries, do not stay longer down the pit than eight hours, and sometimes not that long on a pay Saturday. There are others that stay a little over nine hours, but there are very few that stay 10 hours on a Saturday.

6064. The pay day is every other Saturday, is it not?—Yes, every other Saturday.

6065. What is your idea as to the length of time that the boys should be allowed to work?—I think, together with the men of the district which I come from, that the boys under 14 years of age ought to be limited to something like eight hours' work, so as to give them a little more liberty than they have at present.

6066. Would the men be able to work more than eight hours if the boys were cut down to eight hours?—The men do not feel disposed to work eight hours; not the whole of them. I am not aware of any of the men, in the collieries that I come from, that work any more than eight hours, and some do not work so long as that.

6067. You mean that now they do not?—They have not done so ever since I was acquainted with the mines.

6068. Then the boys at present are kept down the mines after the men?—There are two shifts of men; many of the men do not stay more than about six hours in the face, that is to say, the working place.

6069. Then the boys work out two shifts of men, I suppose?—They do not work the exact time of two shifts of men. At some of the collieries, where the pits hang on, that is to say, where they commence drawing coals at six o'clock, the first shift of men go down at half-past two or three o'clock in the morning, and the boys go down at half-past five.

6070. Is the coal that has been cut cleared out of the mine every evening before the work is done?—Not always.

6071. But most of it is?—The most part of it is.

6072. The boys then would stay a little beyond the second shift of men, I suppose; when would the first shift of men leave off?—The first shift of men in the pillar workings leave off at about eleven o'clock; those that go down about half-past two in the hole working, the back shaft men, change at about ten or a little after ten o'clock.

6073. How long do they stay down?—Some of them stay till about five o'clock; others not quite so long; but in general I think they stay a little over five o'clock; few stay till six.

6074. Then the boys come out at about the same time as the second shift of men do?—About the same time. There are times when there are so many tubs which remain to be drawn after the proper drawing time of the pit is over that some of the boys have to stay down and assist.

6075. When do they cease drawing coal?—At some of the collieries they cease drawing coal at the 12 hours' end; at other collieries they go from six to seven in the evening.

6076. But never more than 13 hours?—I have never known them more than 13 hours; I should say that it is not a general thing for the pits to go on for 13 hours.

6077. Are there any women employed at the pit's mouth?—No, not in the county that I know of.

6078. Mr. *Liddell.*] You have just now spoken of two shifts of men, and you described the first shift as going down at half-past two; the boys go down about six in the morning, I think you have said?—About half-past five.

6079. And they work, on an average, 12 hours?—I think, upon an average, they work a little over 12 hours; that is, between going down the pit and coming up again.

6080. The first shift of men have usually done their work by about 11 o'clock in the day?—That is in the pillar workings.

6081. Then you have spoken of a second shift of men. Are there night shifts of boys, or how is the work which has been done by the second shift of men removed?—The work is removed just as they get the coal. A man is calculated to do so much work in the day; and in the district that I come from, in the county of Durham, the men fill the coals as they get them. There are empty tubs standing for them to put the coal in as they get it, and then there are boys to take them away as fast as they get the coal.

6082. I thought you told the Committee that there was only one shift of boys?—There is only one shift of boys.

6083. Is there a night shift of boys?—It is very few collieries where they have any night shift of men employed. At the colliery I came from, I think there would be, at present, eight men hewing coal in the night time; and for those four men, I think, not more than two boys are employed.

6084. Are those two boys sufficient to draw the coal hewn by the four men?—Yes.

6085. At what time do those boys go down?—At half-past five o'clock in the evening.

6086. And when do they get up again?—Sometimes they get up soon after one, but there is no particular time for their getting up; they are dependent entirely upon the one shift of men. There is a difference in men in the way of doing their work; some men can do their work sooner than others, and the sooner they get their work done and get out of the pit, the sooner the boys get out; so that I cannot say anything of the hours of those boys who work in the night shift.

6087. The night-shift work is comparatively exceptional work, as I understand you?—Yes.

6088. If the first shift of men go down at two o'clock in the morning and the boys do not go down till half-past five o'clock, there must be a considerable accumulation of coal by the time that the boys go down, must there not?—The reason why those first shift men go down so much sooner than the boys is to get the coal ready by the time the boys come, so that they will have nothing to do but to put the coal into the empty tubs.

6089. That

6089. That set of boys come up again about the time the second shift of men have done their work?—Yes, about the time that the second shift of men have done.

6090. So that one set of boys coal for the two shifts of men?—Yes. According to the bonds and agreements that we have throughout the county of Durham, we have to work eight hours at the face; but that is not binding, at least, it is not carried out to the full extent. In some of the collieries they are compelled to stay in the place for eight hours, but in others, as soon as they get a reasonable amount of work done, they are allowed to come out of the pit; the latter is more usually the case. The pits draw coal generally 12 hours, and some of them 13. If the first shift of men were not to go down the pit before the boys, they would not be able to keep the pit at work drawing coals the whole of the 12 hours.

6091. You spoke about pillar workings, and you also used the phrase "hole workings"; those are the workings that are worked by the long wall system, I suppose?—The "hole working" is the breaking part of the vein of coal, or the solid coal; the pillar working is after the hole working is completed, bringing the whole of the coal back again that has been left, that is to say, working outward of the mine or working the mine back.

6092. When you speak of the "pillar workings," do you mean the old system of working by stall and pillar?—The word "stall" is never used with us in the county of Durham; we have a different system of working from that in the shires. Our way of working is driving up at what we call boards. Boards are driven from four to five yards in width, and about every 20 yards, or 30 yards in some places, there is a narrow place cut the contrary way, so that they are able to get air to circulate from one working place to another one.

6093. You say that the boys get very tired?—Some of them; I did not say the whole of them.

6094. The younger and weaker boys get tired, I suppose?—That depends entirely upon the nature of their employment. The younger boys are generally employed at door-keeping, and door-keeping is no harder work than sitting here, only that it is confinement in the pit.

6095. You said, I think, that the pony drivers tire very much?—Some of them get very tired. Much depends upon the nature of the work at the particular place. Some pony drivers have harder work than others; sometimes they have much pulling at the tubs.

6096. You suggest that the boys should only work eight hours. Supposing that the shift of boys only did work eight hours, I want to know what the effect of that would be; would it not necessitate the employment of double, or at least of one-third more, the number of boys?—Undoubtedly it would; they would be compelled to have more boys if the pit continued to draw coals for 12 hours, and if they had the same number of men.

6097. That would be the necessary consequence, therefore, of shortening the hours of labour for the boys?—It is for the benefit of the boys that we wish the shorter hours, not for the benefit of anyone else but the boys.

6098. You would propose then, I presume, to have two shifts of boys corresponding to two shifts of men?—Yes, that is what we want; we think it should be done.

6099. Do you think that a boy after he had worked for eight hours in the pit would be in a condition to derive advantage from going to school?—He would be in a condition to do so provided he embraced the opportunity of going, and that his parents would insist upon it. Mr. *G. Parker.* 14 May 1866

6100. He would be sufficiently fresh, you think, both in body and mind, to derive advantage from his schooling?—I think that he would be much better for the shorter time he stayed in the pit than if he stayed in the pit so long as they do now.

6101. Do you not think that if boys were only employed that number of hours in the pit there would be a tendency on the part of the parents to employ them in some other branch of occupation in preference to their going down the pit?—I do not think they would; not in general; there might be exceptional cases.

6102. There are plenty of other means of getting employment for boys besides mines, are there not?—Not in all places, only where there are public works, such as iron works and so on.

6103. But are there not a considerable number of iron works all over the county now?—Not all over the county.

6104. Sir *Philip Egerton.*] Have the boys any time allowed them for meals during the 12 hours that they are down the pit?—No, they have to get their meals as they can.

6105. Mr. *Hussey Vivian.*] What becomes of the other boys that are not employed down in the collieries?—I am not aware of any boys belonging to the colliers that are running about playing that reach 12 years of age. There are some, but very few indeed, put to any trade.

6106. So that nearly all the boys belonging to the colliers are employed down the pit, are they?—The most of them; some of them are employed on the screens and other places about the pit top, but it would be a very few only.

6107. Supposing there were a double shift of boys, where would those boys come from, because there would have to be double the number, I presume?—There must be double the number if there is a double shift.

6108. Where would the double number come from?—I do not know, that is a matter of indifference to me; what I want is, for the benefit of the boys that are employed, to have shorter hours in the pit.

6109. That, I think, we must all agree with you in, but I merely ask, as a matter which perhaps you can explain, where it would be likely that the coal owners could obtain the number of boys required for that system?—No, I cannot explain that; that I suppose would be left to the coal owners for them to do the best they could.

6110. They must import them from other districts, I suppose?—I do not know; I have nothing to do with the getting of the boys.

6111. Sir *Philip Egerton.*] Are you aware that in some collieries the doors are self-acting swing doors?—In all the cases that I know where they have self-acting doors in front of the canvas, or a few yards in front of it, there is generally a frame door and a trapper set to that door.

6112. By any mechanical arrangements of the doors, could those boys be released from attending to the doors, and so be made available for other work?—It is thought, both by agents and men generally, that where doors are particularly required, one trapper is required, at least, at the main door, to see that nothing takes place to pre-

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vent that door getting closed after anyone has gone through.

6113. You think that by no mechanical arrangements that can be done away with?—I am not aware that it can; we think that it is much safer to have boys at least at the main doors.

6114. Mr. *Hussey Vivian.*] How many main doors are there in collieries generally?—It depends entirely upon the bounds of the interior of the colliery.

6115. In an average sized colliery how many main doors are there?—That I cannot say.

6116. Are there half a dozen?—There are more than half a dozen in some collieries; there are other collieries where I do not think they have half a dozen.

6117. It is a very bad practice to have main doors, is it not?—Not to have main doors.

6118. But to have more main doors than are necessary?—The main doors are very much required in the county of Durham, inasmuch as when there are many intakes and outlets it requires doors.

6119. The fewer main doors the better?—The fewer main doors the better; but we cannot do without them.

6120. In an extensive colliery there might not be more than half a dozen, I suppose?—That I cannot say.

6121. But the bulk of the boys are not employed in door-keeping, at any rate?—No, in other work.

6122. Then, the difficulty would not be met by any mechanical arrangement of the doors, supposing that were possible?—I am not aware that that would be any improvement; I think it would be much safer to have somebody to mind the doors.

6123. Can you suggest any system by which the work now done by boys could be otherwise done, so as to prevent the boys being down the pit so long?—No, I am not prepared to do so.

6124. Mr. *Liddell.*] If the boys only worked eight hours, would the boys expect the same wages as they now receive for working 12 hours?—We should probably want as much wages for the boys as we could get.

6125. Then, you would practically expect that they would get the same amount of wages?—I do not think they could require less; 1*s.* to 1*s.* 3*d.* a day, and finding their own candles and oil out of that, I think is little enough; they could not well do with much less.

6126. What would be the consequence if the pits only drew coal eight hours a day?—The consequence would be that there would be much less coal produced from the mine.

6127. Would not that raise the price of coal very considerably?—Certainly, it would lessen the supplies in the market, and, probably, it would come to that; but that is not what we want; we are not wanting eight hours for the boys on account of getting less coal out of the pit; we do not want to interfere with the getting of the coal out of the pit at all; all we want is short hours for the benefit of the boys now employed; we do not wish to interfere with the working of the mine apart from that.

6128. One of two things would happen, either less coals would be drawn, and, consequently, the price of coal would be raised, or else a larger number of boys would be employed, and a greater expense would be thrown upon coal owners, which they would naturally take out of the consumers of coal by an advanced price, is not that so?—How that would turn out I do not know, but that might be left, I think, with the coal owners and their agents.

6129. Mr. *Clive.*] But do not you think that you are bound to consider that question?—I am not able to answer it.

6130. You are asked whether something which you suggest will have certain consequences, and you say that you have not considered them; do you think that, under those circumstances, your evidence has much weight?—I am just giving my opinion; I say that we desire that the boys should have less hours in the pit.

6131. And when you are asked what the consequence of that will be, you say you do not know, and do not care about that?—No; I do not say that I do not care about it, but what we want is to have the number of hours lessened for the benefit of the boys.

6132. Supposing the price of coal to be raised, you consider that of no importance?—I do not say that it is of no importance, but I say that I am not able to answer the questions which were put to me on that matter.

6133. *Chairman.*] You think that the effect that this may have upon the price of the coal is a thing for Parliament to consider, and not for you?—It is not for my consideration; I have not come here for that purpose.

6134. As to the boys that go down at night, they are not the same boys that have been down in the day, of course?—No.

6135. What age are the boys that go down at night?—Just about the same age as the boys that go down in the day time.

6136. Under 14?—Yes; under 14. I do not mean that all the boys that go down the pit at night time are under 14, but I am not aware of any under 12.

6137. They would be the older boys that did the night-work, would they not?—That depends upon the nature of the work they have to do.

6138. As these are not the same boys that go down in the day time, they are supernumerary boys, are they not?—Yes.

6139. Are they not required to do any of the day-work?—No; as soon as the shift of men have done that are working in the night time, then those boys have done.

6140. It occasionally happens then, as I understand you, that the boys go down at night, and those are not the boys that have been working the same day, of course?—No; it is very rare throughout the county that boys are required to go down by night time. I am not aware of more than a few collieries throughout the whole county that employ any men in getting the coal during the night time; it is not a general thing with us.

6141. Do they get extra pay for going down at night?—No; the only advantage that they have is, that they generally have shorter hours down the pit.

6142. But they are the same boys on occasions that go down in the day, are they not; they are not always a distinct set of boys, are they?—Once in three months the boys that are in the day shift have a chance of getting into the night shift, and those that are in the night shift have a chance, at the end of the three months, to get into the day shift; as many boys are taken from the entire number they have, as are required to do the work.

6143. And those boys do not work by the day?—No.

6144. Mr. *Liddell.*] Do they like being put on the night shift, on account of the shorter hours?—Most of the boys do.

6145. And then they lie by during the day, and sleep, I suppose?—Yes, or play, as they think proper.

6146. *Chairman.*] Do the boys between 12 and 14 go to school at all?—I am not aware of any that go to school in the locality that I am living in, but I have been informed of some in the east of Durham that attend the night schools in the week.

6147. How are you provided with schools in your district?—Pretty well; we have plenty in my district.

6148. What are those boys that go to school, if the miners' boys do not go?—In the district in which I am employed there are iron works, and a great many boys go to school from those iron works.

6149. The boys working in the iron works go to school more than the coal boys you think, do you?—I am not prepared to say so.

6150. Mr. *Liddell.*] Do the boys that work at night attend school during the day?—Some of them, but only in very exceptional cases.

6151. Are there not hours in the day when they might attend under those circumstances?—They might, but they do not always embrace the opportunity.

6152. *Chairman.*] As to the ventilation, is the ventilation of the mines in your district in a satisfactory state?—The inspection is not.

6153. We will come to that subject afterwards; but is the ventilation of the mines in a satisfactory state in the whole of the district?—Not in the whole of the district; there are some collieries where the men complain of a slackness of air.

6154. What are the evils arising from want of ventilation; is it explosion or bad air that is chiefly complained of?—We have not many cases of explosion on record, but very few; it is mostly bad air, or black damp; the men not getting the lamp to burn as they like. Some men are much injured in the chest from that cause; there are others that do not at the time feel the injury, but it injures some in particular.

6155. What is the system of ventilation in the district; is it by two shafts and a furnace?—Yes, that is generally carried out, I think.

6156. What defect is there in the ventilation where there are defects?—It is generally thought, although we, the workmen—that is to say, the getters of coal, or the colliers—do not inspect the mine, that there is something wrong in the wastes, that where the mines are not well-ventilated the wastes are not sufficiently kept open. We think so, but we are not able to prove it.

6157. You think that where there is defective ventilation, it is because the wind-way is not kept sufficiently open?—That is the general idea, but that we are not able to say from experience, inasmuch as we never can inspect the mine.

6158. Mr. *Hussey Vivian.*] You speak of wastes; what do you mean by that term?—The whole of the air-ways, apart from the main in-road into the working places of the mine.

6159. *Chairman.*] In the colliery where you are working is the ventilation satisfactory?—The ventilation in the colliery where I am is pretty good.

6160. But you hear complaints in other collieries, do you?—In other localities I find many complaints, but I am not aware of any of the colliers that are able to give the why and wherefore of the deficiency of the current of air.

6161. Do the workmen suffer much in health from want of ventilation, do you think?—Some of the colliers suffer more than others. The younger colliers very seldom complain of want of health from working in any places, unless they happen to be working in some of the exceptional places, where the candle has to be in that position (*describing the same*), in order to make it burn. That is not general, however.

6162. That is where the black damp is, I suppose?—That is where the black damp is; but in the colliery that I come from we have nothing of that.

6163. Then according to what you hear and believe the ventilation is defective in the mines which are not liable to explosion, and in the mines where there is explosion the ventilation is better?—Where they are liable to explosion the mines are generally better ventilated; at least it is thought so, and the men experience that in their working places.

6164. Do you find that men break down at an early age, from working in mines where there is this black damp?—The colliers that are working in places where there is powder reek, or where the candle has to be in a sloping position to get it to burn, often complain of headaches during the time that they are working.

6165. Do you notice that they break down from ill-health about the age of 40 or 50?—Yes. There are some men, I believe, that break down mostly from excess of labour, but there are others that are very much injured by this powder reek. There are some of the working places (it is not generally so) where there is not a sufficient current of air to take the powder reek away quick enough to make it pleasant for the men to work in, and in those places the men generally have a headache during the time that the powder reek is standing. But in some of the collieries, and particularly in the colliery that I come from, I can say from experience that there is generally a pretty good current of air in the face of the working, and the brattices are kept pretty near the face, so that the men suffer but little in that way.

6166. And that might be the case in other mines, I suppose, if the same care were taken?—It might, but I am not prepared to say that it would.

6167. In your district there have not been many accidents of late from explosions, have there?—No; very few in my district that I can remember.

6168. The complaint is of bad air, you say?—Yes, in some places.

6169. You spoke of powder reek; do they use powder much?—Yes; in the hole working they use powder very much; we cannot get the blasting done in any other way in most of the mines.

6170. Mr. *Clive.*] How long have you worked as a miner?—A little over 19 years.

6171. Have you ever yourself worked in any colliery where there was this annoyance from black damp?—Yes; in one part of the mine, in the pillar workings in the colliery that I am in, a few years ago we had black damp, but that part of the mine is done now altogether.

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6172. When you speak of complaints generally, what do you allude to; to any particular men, or any particular colliery, or what?—To men in different collieries in the district, who are continually complaining of bad ventilation. We have men that are frequently complaining of bad ventilation, but I am sorry to say that we have few men that have the boldness to write to the inspector; and more than that, it is generally thought that the inspector has too much work in the district (I believe he has about 160 collieries), or else, on the whole, our inspector, Mr. Atkinson, is well liked by the men in the county of Durham.

6173. Mr. *Liddell.*] Will you tell the Committee what is the effect of the black damp upon the men; does it produce asthma or pains in the chest?—Yes, it produces asthma and pains in the chest, or pains in the head.

6174. Do you know many men among your own personal acquaintances affected by asthma?—Yes, I know a good many.

6175. Do you think asthma very prevalent in the district?—Among the men that are above 40 or 50, it is.

6176. Do you think that the generality of the miners are more affected with asthma than other men?—No, I do not think so.

6177. You do not think, then, that it is general in the county of Durham?—No.

6178. Then that would argue that the ventilation is, for the most part, good, would it not?—For the most part it is good, but it is not to the satisfaction of the colliers, inasmuch as it is not so good but what it might be improved.

6179. You think it might be made better, in fact?—Yes.

6180. You told us just now that in those parts of the working where there is blasting, and there is a good deal of powder reek, the ventilation is not so good, in consequence of the want of space in the return air-ways; but you added, "we are not able to say so; we only think so;" will you explain that answer?—We have not the power to inspect the mine; we are only allowed to go into the part of the mine that we are working in; as for the return air courses, we know nothing about them except from what we hear from those who work in them, called the waste men. When there is a slackness in the current of air we think that something is wrong, but we are not always able, indeed it is very seldom that we are able, to detect the wrong, and for that reason I cannot say for certain what is the cause of the slackness of air.

6181. Supposing that you are working in a place where you feel the need of a better current of air, and you become oppressed, and have a pain in your head, do not you make a representation to the viewer, or the man who is charged with the care of that department?—In the absence of the viewer or the overman, the deputy overman has the care of that particular part of the mine.

6182. Is he not always pretty near at hand so that you may tell him anything?—Decidedly so; but we have a good many men (in fact, it is true of the most part of the men in the county), who are afraid to make their complaints known.

6183. Why are they afraid?—The reason they assign is that they are afraid they will be picked out by their employers and be turned away from their employment.

6184. Do you know any instance of a man who has made a complaint of bad ventilation in the particular working where he was, and who has been sent away for that reason?—I only know one instance where a man told me that he lost his work in the colliery for writing to Mr. Atkinson, the Government inspector, when the pit was in a very bad state; I am not prepared to say that he got his notice to leave for that reason; but he said that that was the reason. The man's name is Edward Rymer; he is living not more than two miles from the place where I live.

6185. That is the only instance your memory supplies you with?—That is the only instance. I can say, for myself, that I have not been injured by it, inasmuch as I have written more than once to Mr. Atkinson in reference to complaints of the men, and I have not taken any harm by it; but the men generally are afraid to do so.

6186. Then it would appear, would it not, that they are afraid without a reason?—The only reason which they can assign is that, at many of the collieries, if men make complaints of that kind, they are told that if they are not satisfied they can leave the collieries; but that instance which I have named is the only instance that I can refer to where a man lost his work for complaining of bad ventilation.

6187. Mr. *Clive.*] In that instance did the man tell you that he had made any complaint to the viewer before writing to the inspector?—No; he did not say so.

6188. In your own case did you make any previous complaint to the viewer, or did you write straight off to the inspector?—In each case the viewer was acquainted with the wrong. I did not make the complaint known to the viewer, but others in the colliery did so. I wrote to the inspector to get his views in order to prevent any dispute arising among the men, and in each case we have succeeded in getting that put right which we thought was wrong without any dispute, and I have not got any harm by it.

6189. Mr. *Foster.*] What further remedy do you suggest in respect to the ventilation?—I am not prepared to point out the remedy; but we think that it ought to lie entirely with the inspector; he ought to see that these things are remedied.

6190. Are you acquainted with the general rules of the Act of 1860?—I have the general rules with me.

6191. Are you aware that by the first rule it is required that "An adequate amount of ventilation shall be constantly produced in all coal mines or collieries"?—I am aware of that; but we colliers do not understand the reason of those words, "under ordinary circumstances" being in the rule.

6192. You object then to the words "under ordinary circumstances"?—We want an explanation to understand what is meant by these "ordinary circumstances"; they are not explained to us in the rules that are given.

6193. I presume there is no doubt what it does not mean, or whether it has reference to the ordinary course of work of which you have been speaking?—We think that all places where workmen are ought to be ventilated sufficiently to prevent explosion, or any injury to the men. We think that those ought to be considered working places, and in the case of working places where there is any deficiency, we think that they ought

ought to be stopped until that deficiency is made up. But in reference to the "ordinary circumstances," it is not at all understood in the county I come from.

6194. Mr. *Clive.*] Have you ever thought of any other words instead of those, that you would like better?—We have thought that "under ordinary circumstances" ought to be taken out, and that an adequate amount of air ought to be circulating through the whole workings of the mine, so that there would be no dangerous places for men to go into.

6195. Sir *Philip Egerton.*] With reference to the blasting in the mines in which you work, what length of time does it take for the powder reek to clear out of the working after the shot has been fired?—Where there is a good current of air it passes out in a few moments; but there are some cases where there is not a strong current of air flowing in that particular place, owing to the distance it is from the air, and sometimes it stands for several minutes. I have known it in some cases to stand for an hour, and I have heard of it standing for a whole day, but I have not seen that.

6196. Do you find that the miners are in too great a hurry to go into the workings after the shot has been fired, and that in that they injure themselves?—They are compelled to go into the workings as soon as possible, or else they are losing some of their wages.

6197. Has any experiment been tried with gun cotton in your mine, with a view to obviate the powder reek?—I have never heard of any.

6198. *Chairman.*] You sometimes have to sink a second pit in the mine itself, have you not?—Yes.

6199. How is the ventilation provided for there, or have you known that done in any colliery?—In the colliery I am working at there is a trouble which causes them to sink a shaft below the main shaft.

6200. How far is that from the foot of the main shaft?—About 600 yards away from the foot of the main shaft.

6201. How do they provide for the ventilation of that new shaft?—At present they have a part of the shaft bratticed off.

6202. They divide it into two?—They divide it into two; one part of the shaft is for the drawing of coals, and the other is for an up-cast shaft; the coal shaft is the down-cast.

6203. They do not use any furnace at the bottom of that shaft, I suppose?—They have not a furnace at the bottom, but they have commenced operations to do away with this shaft, that is, they have commenced a drift of about 150 yards, and it is expected that in 12 months or so they will be able to complete it.

6204. It is not a common thing then for them to make these fresh pits, is it?—No; I am not aware of another in the county of Durham.

6205. Was there any accident in this pit?—Yes; there were two men hurt.

6206. Whose fault was that?—I am not prepared to say.

6207. Was it an accident from explosion?—Yes, from explosion; one man was severely burnt; the other was not much the worse for it; his hands were burnt a little.

6208. They work habitually with naked lights, do they not?—They work with the Davy lamp when the fore shift man goes in, unless the deputy says that he is to work without it; unless the deputy says that he is not to work without it, he works with it until he thinks himself that there is no danger in taking the naked light.

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6209. Is the viewing of the mines by the deputy satisfactorily done?—Yes, I think it is, as far as I have seen, with the exception of one case, which happened, I think it was in April, at the Page Bank Colliery. I am told that there was one place which the deputy had not examined. The fore shift man went to his work, and after he had got his clothes off, when he was sticking his candle up on the coal, the gas ignited, and he got severely burnt.

6210. The deputy had not looked at the place you were told, were you?—I understood that he had never been in it. If he had been in it he had not examined it properly.

6211. Are there firemen besides the deputy?—No, not in our collieries; there is no man allowed to go into a working place until the deputy has gone round and inspected it.

6212. Does the deputy make his rounds every night?—Every morning.

6213. Does the deputy get paid more than the miners can generally get?—I am not aware that he does, but he is paid differently from the miner; he is paid by the day. At some of the places the deputy is paid by the score.

6214. Is it considered a promotion to be made a deputy?—It is considered a promotion to be made a deputy, but I do not think that a deputy undergoes any examination. When a deputy is wanted, I think there are many applications for the post from the coal hewers, and the manager takes the one that he choses.

6215. Are the men generally satisfied with the competency of the deputies for their work?—They are not; it is thought that the deputies ought to be well up to the carrying of the air throughout the mine; that is to say, that they ought to understand something about ventilation, and the general idea is that the deputy ought to undergo some examination before he is accepted as a deputy; we are not aware that it is so now.

6216. Mr. *Clive.*] You stated that in one colliery that you mentioned, a pit has been made lower down than the main shaft?—Yes, about 600 yards away from the main pit.

6217. How long ago was that?—I cannot say exactly; about two or three years ago.

6218. Is there only one shaft in that case?—There is only one shaft, but they are now working the pit to do away with it altogether.

6219. Sir *Philip Egerton.*] But, as I understand you, the shaft is bratticed?—Yes.

6220. Mr. *Clive.*] You are aware of that Act, passed three or four years ago, which requires a double shaft in every instance?—Yes.

6221. That Act, then, is not complied with in this instance?—Not in this instance; with us that place is called a staple, that is the name it gets with us.

6222. How does anyone get out of the staple?—There is an engine or a machine, and there are two cages.

6223. But, supposing that any explosion takes place under that staple, the only mode of escape is by the same shaft?—Yes.

6224. Mr. *Liddell.*] What class of men are the deputies, for the most part?—They are taken from the ranks of the colliers, that is to say, the coal hewers. When a deputy is wanted, it is known, and there are several of the hewers that wish for deputy's work, and the master selects from

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from amongst those who apply for it the one that he wishes.

6225. Then, according to that statement, the deputies are in most cases, or in all cases, experienced workmen in that particular colliery, are they not?—Not always in that particular colliery; sometimes a deputy comes from another colliery.

6226. Do they often make strangers deputies?—No, it is not generally so; it is generally the case that they are chosen from among the body of men working in the same colliery.

6227. Then they are selected, for the most part, as being experienced men, are they not?—That I do not know, it is left entirely with the masters. All that we want is that they shall be examined, to prove that they are practical miners, and capable of managing the work that is entrusted to their care.

6228. What is the rate of wages that they earn mostly?—From 4*s.* up to 4*s.* 6*d.*; there are a few, I believe, that reach 5*s.* a day.

6229. And what does an ordinary good worker earn in the seven hours, for which, I think, you said the men work?—And the wages of the hewers of coal, they differ much throughout the country. At the colliery that I came from, the average of the men's wages is a little over 4*s.* a day; there are some where it averages more, and some where it averages less.

6230. According to that a deputy earns from 6*d.* to 1*s.* a day more than a good hewer, does he not?—No, that is not always the case; deputies' wages generally run about the same as the best of the hewers.

6231. There are a good many strangers employed in the collieries in Durham, are there not?—Yes, a good many.

6232. Do you find that the strangers are as careful men as the county of Durham men themselves?—There are some that have come from Ireland that have never been accustomed to work in collieries, and they require some training before they are as careful as the old hands. It is generally thought that the county of Durham miners, and the Northumberland miners, are the most careful in our collieries, but still the strangers soon imitate us, and in that way we are pretty near all alike, unless in some exceptional cases.

6233. But you find that a stranger is more apt to be careless, as I understand you, than the native collier himself?—Yes, if he has not been accustomed to colliery work; we have a great many strangers amongst us that come from other mines, but they are in general almost like ourselves.

6234. Are the Irish in general good workers?—Some of them are capital workers.

6235. And do they soon learn to be careful when they find out what the danger is?—Yes, they are soon made to be careful.

6236. Sir *Philip Egerton.*] Have you had any accidents from blasting in your district?—Very few.

6237. Do you use iron tamping rods and prickers, or copper?—We use iron.

6238. And what material do you use for tamping?—The smallest of the coal dust.

6239. In case of a shot being fired, have you any precautions as to not approaching the place for a certain time?—Yes, the man generally judges of that himself.

6240. Do you think that sufficient precautions are taken in regard to the blasting in your mine?—I am not aware of any accidents that have arisen from that; but I can refer to a case of one of the strangers that I have been speaking of. He came to work at a colliery called Sherburn House, and he was so ignorant of the nature of blasting that he was silly enough, when he came near the place, to hold his light up in this way (*describing it*); that man got hurt, but it taught him a lesson.

6241. Mr. *Liddell.*] Was that man a stranger?—Yes, he was then, but he is not now; he has learnt the lesson thoroughly now.

6242. Mr. *Foster.*] Do accidents more frequently occur from incompetency on the part of the under-viewers, or from recklessness on the part of the men?—That I am not able to answer; I know very well that, as far as falling of the roof goes, that matter is generally pretty well attended to by the deputies.

6243. Have you ever known any accidents occur from recklessness on the part of the men?—No, I cannot refer to one.

6244. Have you had any accident in the pit in which you are working in the last three or four years?—A boy was killed.

6245. Have you had anyone burnt?—We have had two men burnt; one was slightly burnt, the other severely burnt.

6246. What was that owing to?—Owing to gas that came off from a blower in the floor of the working; there was no defect in that case of the brattice, inasmuch as the brattice was pretty near the face; it did not go any further than the working place.

6247. Have you ever heard of any accident occurring in the county of Durham from carelessness on the part of the working men?—I have not heard of any; we had a boy killed a couple of weeks or so ago in the colliery that I work at, entirely through his own carelessness; he was trying to get at the tubs as they were running along the engine plane, and, being a boy only 12 years of age, he was taken off his feet by the tubs and killed.

6248. Do you often hear of accidents occurring owing to incompetency on the part of the under-viewers?—No, I am not aware of any; I cannot myself state any; I do not hear that complaint.

6249. Therefore, are we, generally speaking, to infer that the under-viewers are fulfilling their duties satisfactorily to the employers and to the men in the pit?—So far as the safety of the men goes, in respect to preventing the fall of stone and other accidents, apart from the firedamp, there is a good feeling between the workmen and the employers in that respect.

6250. Why, then, do you express this great anxiety for the under-viewers to undergo an examination?—It is not the under-viewers; it is the deputies that should undergo that examination.

6251. When I have been speaking of under-viewers I have been meaning deputies. Would the remarks which you have made about the under-viewers apply to the deputies; have you ever had an accident, for instance, from incompetency on the part of a deputy?—Yes, one at the Page Bank; a man was burnt through the negligence of the deputy in not inspecting the place; or, if he did inspect it, he had not taken proper precautions to prevent men from going into it; that is the only instance that I can refer to.

6252. They are generally selected as being steady,

steady, sober men, I presume?—I do not know that; I know a good many drunken deputies. How they are selected I am not prepared to say, further than this: that, when a deputy is wanted, there are several applications for it, and the under-viewer of the colliery selects whom he likes.

6253. I suppose that, even with an examination, they would not be sure of getting a sober man, under all circumstances?—We think that is required.

6254. Would an examination ensure a man being sober at all times?—No; neither do we think that the fact of a man's being sober would always be a guarantee of that man's competency as a practical deputy.

6255. Mr. *Liddell.*] Do you think that the rate of wages paid to the deputies is sufficiently high to guarantee their being thoroughly experienced and competent men?—That question I am not prepared to answer; there are some coal-hewers who prefer coal-hewing to deputy work.

6256. I suppose a deputy is not unfrequently a man who has passed his best, and who is no longer so strong a man as he was?—No; in general it requires strong men to act as deputies.

6257. Is the work that a deputy is called upon to perform such, that in all cases he must be a strong man?—In the pillar workings it requires a strong man to draw the timber to let stone down after the coal has been taken out.

6258. Is that work done by the deputies?—That work is done by the deputies.

6259. *Chairman.*] The deputy draws the timber himself, does he?—Yes, he draws it himself; but the coal-hewer who has been working in the place last assists the deputy in the taking of the timber away. There are always one or two men with the deputy during the time that he is knocking the timber out; as the deputy knocks it out, there is a man ready to pick it up and take it away.

6260. And that is work that requires the deputy to be a strong man, you say?—Yes, a man who is able to give a good blow.

6261. Mr. *Liddell.*] When the workings are done with, and the pillars are removed, is the deputy always present on those occasions?—Yes.

6262. That is work that requires to be carefully done, I presume?—Yes, that is done by the deputy, with the assistance of the man who has worked in the place last.

6263. *Chairman.*] Does the roof generally come down when they knock the timber away?—In some cases, but not frequently; sometimes it comes away before the whole of the timber is got out, and then it buries some of the timber along with it.

6264. The object of taking the timber out is economy; it is in order to save the timber, is it not?—To save the timber, and to cause that part of the mine where the coal is taken from to close; that is what we call our goaf.

6265. The object is to close the place so that it may not become a receptacle for bad air?—It sometimes happens that at the falling of these workings, gas has been thrown several yards into the air course, so that men have not been able to get in for some hours.

6266. Have you known what they call outbursts of gas in any mine where you have worked?—Those are the outbursts that I am now alluding to; but in these cases the deputies in the collieries to which I belong are very careful. The man that has been working in the place is not the first that goes to see whether there is any gas present to ignite, it is the deputy's duty to do that, and he generally attends to it.

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6267. You said that the inspection was not sufficient, did not you?—The desire of the men is that there should be more inspectors, inasmuch as we generally think that the present inspector has too much work; he has now about 160 collieries, and there are others in the way of sinking, so that by-and-bye it will be much more work even than it is now.

6268. Does the inspector ever come of his own accord to visit the collieries?—I believe he does.

6269. Have you seen the inspector in the colliery where you are now working?—Yes; some five or six times of my own knowledge.

6270. Does he come of his own accord?—Not always.

6271. Do the workmen ever write to him to ask him to come?—I have written twice, and each time he came at my request.

6272. Did you get into disgrace with your employers for writing to the inspector?—I was never so much as spoken to about it.

6273. Did your employers know that you had written to the inspector?—Yes.

6274. What was the sort of thing that you wrote to him about?—The first time it was in reference to an engine playing, which some few years ago was laid down in the Whitworth pit, and it was thought that it was not a safe travelling road; there were very few recesses for the men to get into, and some of the men were disposed not to accept it at all, but the more considerate part of us thought that the best way would be to write to the Government inspector, and then the question was who was to write, and when no one else would write, I took it upon me to write to Mr. Atkinson; he came, and he wrote out a paper suggesting certain improvements, and they were attended to, and since that time things have gone on pleasantly in that respect.

6275. You have got sufficient recesses according to the Act, I presume?—Yes; I think we have, inasmuch as I do not hear of any complaints in that respect, and I do not see any grounds for any complaints.

6276. You have not heard of accidents from that cause?—Not for want of recesses; the only accident was the one which I mentioned as happening to that boy.

6277. Do you think that the space allowed by the rules between the recesses is too great?—No, I do not think so.

6278. Some witnesses have suggested that there should be a recess every 10 yards; do you think that necessary?—The more recesses there are the more convenient it is for the men; but I am not aware of any accidents in the county of Durham arising from the want of recesses.

6279. In your opinion 20 yards is not too great an interval?—I would not object to an improvement of less than 20 yards; but I would say that it certainly should not be more than 20 yards.

6280. You have no great fault to find in that respect, as I understand you?—Not with that.

6281. Mr. *Liddell.*] You have just stated that on that occasion, when you had a complaint to make, and you addressed the inspector, the inspector immediately attended to your complaint, and the evil was removed of which you had complained?—Yes.

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6282. And no harm happened to you?—No harm happened to me.

6283. And the evil was remedied, you say?—Yes.

6284. Do you not think that that is really and, in fact, the proper duty of an inspector, to hear those complaints, and to see that the evil is properly remedied?—Yes, I believe it is.

6285. Yet you want further interference on the part of the inspector?—We want to take it entirely off the hands of the colliers, so that the inspector should visit the colliery at least once in three months, and examine the working places.

6286. Has it ever occurred to your mind that if you threw a large share of the responsibility of management upon the inspector, in respect to the ventilation of the colliery, you would be relieving the owners of the colliery of a portion of responsibility which should properly devolve on them?—We do not wish the inspector to be the manager of the ventilation of the mine; we only want him to see on our behalf that the Act with reference to the ventilation is strictly carried out.

6287. But if you can on all occasions address the inspector and make your complaint, and in consequence of that application have your grievance remedied, do you not think that is sufficient?—Out of the 25,000, or more than 25,000, colliers in the county of Durham, perhaps there are not more than half a dozen that dare write to the inspector. There are some of the collieries in the county of Durham where, if anyone had written to the inspector as I wrote to him, I have not the slightest hesitation in saying that he would have received his notice to quit. Perhaps they would not say that it was for writing to the inspector, but they would find some other complaint against the man.

6288. Do you mean us to infer from that answer that all the colliery owners are not such high principled men as those under whom you work?—No, I do not think that they are. The gentlemen that I am working for, particularly the one that is manager of the colliery, is a gentleman of fine feeling; but he is an exceptional one. I could refer to collieries in the county of Durham where if a man makes the least complaint, he has 14 days' notice to quit the colliery. At the colliery where I work it is 12 months' notice, because we have agreements for 12 months. There is Love & Straker's colliery at Brancepeth, there they have 14 days' notice. They are so strict on that colliery that a notice is put up once a fortnight, on the pay Saturday or Monday, that anybody that lies idle on the pay Saturday or Monday shall be fined 2*s.* 6*d.*, and they are not allowed to lie idle any other day without a certificate from the doctor. Now, on these collieries there is not a man that dares allege any complaint at all, unless he does not care about leaving the colliery; but our colliery is an exceptional one; we have more liberty in that respect than they have generally thoughout the county.

6289. You are paid fortnightly, I believe?—We are paid fortnightly,

6290. Is there any strong wish expressed on the part of the pitmen generally to be paid weekly?—I have never heard the miners in the county of Durham take that up.

6291. Are there no complaints at all with reference to fortnightly payments?—No general complaints.

6292. In the case of a man wanting an advance can he always get it from the manager?—No, not at all collieries.

6293. Supposing that his wife were ill, or that his children were ill, if he made an application for an advance, would he not get it in most cases?—I believe in a case like that he would.

6294. Have you any complaint to make of the constitution of juries in case of deaths by accident in the collieries?—Yes, that is not at all satisfactory in the county of Durham.

6295. In what respect is it not satisfactory?—We think that, at least, part of the jurymen ought to be practical miners, taken from the mine; we do not name the number, but we think there ought to be some; they are generally shopkeepers, shoemakers, tailors, or any people in fact, except the working miners.

6296. You want to have some practical men on the jury, to keep the other people right on the practical questions which occur in the course of the investigation?—Yes.

6297. Would you like that portion of the jury, which is composed of workmen, to be taken from the particular colliery in which the accident has occurred, or should they be taken from the district?—For my own part, I do not care, so long as they are practical miners, come from where they will.

6298. Are there any women employed in your collieries?—No; not in the county of Durham.

6299. *Chairman.*] Have you sick clubs in the district, that you are acquainted with?—Not in the district that I come from.

6300. Or accident clubs?—We have accident clubs or sick clubs, but they are entirely in the hands of the colliers and other working men; they are all connected together, and have nothing to do with the collieries at all. In nearly the whole of the collieries in the county of Durham, in the case of a man being laid aside from accident, the man receives 5*s.* per week; what we call smart money.

6301. Then you have clubs, have you not?—We contribute nothing; it is the owners of the colliery that pay that to us without our contributing.

6302. Then the practice in Durham is for the owners of the colliery to make an allowance, is it, in case of accident?—Yes, an allowance of 5*s.* for each coal-hewer, when he is laid off work, owing to an accident in the mine; and 2*s.* 6*d.* for a boy that is laid off work, owing to an accident.

6303. Are there any stoppages in the wages to make that?—No, none whatever.

6304. The workmen have clubs of their own too, you have stated?—Yes.

6305. Five shillings a week is not enough, I presume, for a man?—There are few of the colliers but do not belong to at least two clubs; some are in the Foresters and the Odd Fellows, and what not.

6306. That is to say, their own benefit societies, which the employers have nothing to do with?—Just so.

6307. Is there any other point which you wish to give evidence upon?—With reference to the weighing.

6308. You are paid by weight, are you not?—At some of the collieries we are, and at others by measure.

6309. Do you prefer the weight to the measure?—Yes, we prefer the weight.

6310. Is there any dissatisfaction in the collieries where they are paid by weight?—Yes.

6311. Do

6311. Do the men employ a check weighman?—In some places they do, but in other places they are not allowed to do so, inasmuch as the master says they are not to have one, and they dare not enforce the Act.

6312. Will you mention those places?—Brancepeth colliery, Love and Straker's colliery.

6313. Do you mean that the workmen have applied to the employers in that colliery to appoint a check weighman, and that the employers have refused to allow them to do so?—I am told by some of the men that they dare not ask for a weighman, because when any of them allege a complaint of any kind, they receive a notice to quit for doing so, and therefore they are afraid to make mention of it.

6314. Then you do not know of any cases, as I understand you, where the employers refuse to allow a check weighman?—They only allow it on this consideration, that if anything is wrong the check weighman is not to interfere with it; he is just to take account of what is weighed and to keep that account for the men; but if anything is wrong he is not to expose that wrong, and we think that as soon as he sees a wrong he has a right to remonstrate till it is remedied.

6315. What power do you wish the weighman to have that he has not now?—We wish him to have the power to speak when he sees anything wrong, without being injured by the employer for doing so.

6316. In what way do you wish him to be able to speak?—If he sees that a tub has not been justly weighed, we think he should be able to stop the emptying of that tub till it is weighed justly.

6317. In what way is he to insure that; is he to have the power of ordering that tub to be put aside?—He should have power to order it to be put aside, but not to stop the working of the colliery; we do not wish in any way to interfere with the working of the colliery; all that we want is justice in the weighing department. At present, justice is not got in that respect throughout the county of Durham.

6318. I understand your complaint on this subject to be, that in some cases the colliers do not ask to have a check weighman, because they are afraid to do so; and that in those cases where they have a check weighman, his services are not effective for the want of sufficient power?—In some collieries he has the power, but it is not generally so.

6319. What power has he in those colleries where he has all the power that you wish him to have?—If he sees anything wrong in the weighing department, he is allowed the power to name that wrong, and to have it remedied. There are other collieries where, for interfering with anything wrong, the weighman will get his notice; that is, to quit the colliery.

6320. In some collieries, that is to say, the employers will listen to the complaints of the weighman, and in others they will not?—Yes.

6321. But even in those cases the weighman has no power to interfere with the working of the colliery; he can only make a representation, I presume?—Yes.

6322. Are the men satisfied with the correctness of the weight themselves?—At most of the collieries throughout the county they are not satisfied, inasmuch as the true system of weighing is not carried out. In some collieries they get a few tubs weighed in the fortnight for each man. They have to take the average of those tubs that are weighed for those that are not weighed, and so they get the average weight. In other collieries, they are not paid by the weight at all; the tubs have to come to bank so full, and if they are below that, then the colliers lose the whole.

6323. That is where they are paid by measure?—That is where they are paid by measure.

6324. And in some cases where they are paid by weight they take the average, as I understand you?—Yes; they take the average. In most of the places they take the average, and then they do not weigh the others.

6325. Do they take the average for each man, or how do they do it?—For each man.

6326. Upon an average, how many tubs would each man send up?—Somewhere near 12 tubs per day.

6327. How many tubs, out of that number, would they weigh to make out the average weight?—Some days not one. In some collieries the make the average up daily. If a man has got one tub weighed in the day, and 10 or 12 tubs to bank that day, the average of those that are not weighed is taken from the one that is weighed. There are other collieries where the average is taken once a week, and others once a fortnight.

6328. Do the men complain of the way in which that average is taken?—They wish for every tub to be weighed, and the reason that that is not done is, that the owners or agents generally tell us that it would interfere with the working of the mine, and that they could not get so much work out of the pit.

6329. Do the men wish to have the weights subject to the inspection of the inspector of weights and measures?—Yes; if it was subject to the inspection of the inspector of weights and measures; I believe in that sense it would be pretty satisfactory, and I believe that is where the greatest dissatisfaction arises, from the men not knowing as to whether those weighing machines are justly examined or not. If they were justly examined, to the knowledge of the men, I believe that even the taking the average weights would be more generally received than it is now. But I have never known, not even at the colliery where I am, the inspector of weights and measures to come and adjust the weighing machine. I believe it is generally done by the employers.

6330. The inspector of weights and measures has no right to interfere, has he?—No, we want the law to extend that.

6331. Have you any other point on which you wish to give evidence?—No, I think not.

6332. You have spoken of the waste of air-ways; the air-ways are made through the waste, are they not?—The waste is that point of the workings that is apart from the main inroad to the working places where the colliers work daily.

6333. Mr. *Liddell.*] Do you remember a long strike that took place at Brancepeth colliery, some two or three years ago?—Yes.

6334. What was the cause of that strike?—The cause of that strike was, that the men wished to combine in support of their interests.

6335. Is there much objection felt, on the part of owners, to employing union men?—There is, decidedly. It is felt throughout the country very often. There are men who seek to establish them, just for the sake of what our employers

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call agitation. The fact is, that if we wish our fellow-workmen to unite in support of their interests, they tell us we are agitators, that they do not want us on the colliery, and that we must seek work elsewhere.

6336. Are you a union man yourself?—Yes.

6337. How long have you belonged to the union?—So far as the necessity of men combining together goes, ever since I came to manhood I have had that thought. But at the same time it is very rare that you get men to keep together when they do combine. We have had many agitations, as they call them, at the colliery where I am working, and though at present we have 160 coal-hewers, out of that number 78 only are in the union, the remainder stand aloof. But there are other collieries where there are no yearly bindings, as there are with us, and as soon as the men attempt to combine the leading men of the combination receive notice to quit the colliery. In this way they are prevented from combining, and that is a pretty general thing throughout the county of Durham.

6338. Then, I gather from that answer, that it is only a small proportion of the pitmen who are members of the union at all in the county of Durham?—Very few in number.

6339. Mr. *Greenall.*] You say that at the colliery at which you work, part of the men are in the union, and part are not in the union?—Yes.

6340. Do you find that the men who are in the union are treated in a more unfair manner than those who are not in the union?—No; not in the colliery where I work; we all receive one treatment in that colliery.

6341. Have you ever suffered persecution because you belonged to the union?—No.

6342. Have you ever lost a situation because you were a union man?—No.

6343. *Chairman.*] In the case of that Brancepeth strike, was there not some question as to the fairness of the measuring?—Yes.

6344. What question was that?—Previous to the men coming out on strike they were not paid by the weight, but by the score, reckoning 20 tubs to the score. The men wished to have their tubs fairly weighed, and when they did get together at the time of the strike, they thought that they might as well have that done when the iron was hot. The dispute was prolonged on account of the employers and the men not coming to terms as to how they were to be paid by weight, that is to say, what weight each tub was to be allowed to carry. By and bye it was decided, and the dispute came to an end; since then they have been paid by weight.

6345. One of the results, then, of that strike was, that they got paid by weight instead of by measure?—Yes, they got paid by weight.

Mr. JOHN GRIFFITHS, called in; and Examined.

Mr. *J. Griffiths.*

6346. *Chairman.*] WHERE do you come from?—From South Wales.

6347. From what part of it?—The Rhondda Valley.

6348. Are you a working miner?—Yes.

6349. How long have you been a working miner?—Twenty years.

6350. At what age did you begin?—When I was 21 years of age.

6351. What had you done before that age?—I had been engaged in agricultural labour.

6352. Is it a common case for an agricultural labourer to take to a mine?—Yes, when he gets a chance, it is in that country.

6353. Do they find much difficulty in learning the business?—Yes, a good deal.

6354. How long is it before they are able to do a good day's work?—They might be two years before they were able to do a good day's work, and some three, and some four, and some never do it.

6355. When you first took to the mine, how much did you get a week?—Eighteen shillings a week, but it was through my relations I got that. I did not earn it myself.

6356. How much would an ordinary man get when he first took to a mine?—Many a man would not get more than 7 *s.* a week.

6357. Some are cleverer than others?—Yes.

6358. Have you always worked in the same colliery?—No.

6359. Have you always worked in South Wales?—Yes.

6360. How long have you worked in the pit where you are working now?—Ten years.

6361. What pit is that?—The Troedrhiw Coal Company's pits.

6362. Have you many boys working in and about those pits?—Yes, a good many.

6363. By boys, I mean under 14 years of age?—Yes, there are a good many under 14 in the different collieries in the neighbourhood.

6364. How many boys under 14 should you say there are to every 100 men?—I should say 20 boys under 14 to every 100 men.

6365. How many of those would be under 12 years of age?—Out of 20 there might be from five to seven under 12 years of age.

6366. Can the boys under 12 generally read and write?—Some of them.

6367. Are the certificates required in the case of those boys?—They have been attended to in these last six months; I have never heard of them before.

6368. They did not require the certificates before the last six months, you mean?—I have never seen one till then.

6369. But since then the law has been attended to?—Yes.

6370. What work do the boys do?—Some of the boys are door keepers, others work with their parents or with other men in the stalls.

6371. What work do they do in the stalls?—They draw coal back in boxes.

6372. To the main-way?—Yes, to the tram.

6373. Is that hard work?—Yes.

6374. Is that too hard work for boys?—It is according how they are put upon. When they are with their parents it is not too hard for them, but it is generally when they are with other men.

6375. You mean that when they work with their parents, their parents take care that they are not put to too hard work?—Yes.

6376. Are many boys employed by the owners of the mine?—No.

6377. They are employed either by their parents, or by other colliers?—Either employed by their parents, or employed by the masters as door boys.

6378. How many hours do the boys stay in the mine?

mine?—Where I work at present they are in the mine, say, from 10 to 11 hours.

6379. When do they begin?—They begin about seven o'clock.

6380. What are the drawing hours of the colliery where you are?—From 10 to 11 hours, just the same; the boys and men work together.

6381. Is not that rather less than the usual number of hours; do not the collieries usually draw 12 hours?—Yes, in some places.

6382. But here it is only 10 or 11 hours, you say?—Yes.

6383. Is that a common case in that part of the country?—It is the general case in that part of the Rhondda Valley. It is the sea-coal collieries that we have in the Rhondda Valley, and there is a deal of loss of time; and, owing to this loss of time the men sometimes work longer hours than at other times; they might work 14 or 15 hours perhaps.

6284. What is the loss of time owing to?—To their being no trade, owing to a deficiency in the vessels, or something similar.

6385. You have no means of sending the coal away, you mean?—That is it.

6386. Because you depend upon the shipping to take it away?—Yes.

6387. But do not the coal owners make stores of coal ready for the shipping when it comes?—No.

6388. They sell it as they bring it out of the pit?—Yes.

6389. Have they no coal stores at all?—No.

6390. What are the hours of the men for work?—Ten to 11 hours generally, but occasionally they work 14 or 15 hours.

6391. When the men work 14 or 15 hours, do the boys also work 14 or 15 hours?—Yes.

6392. Then the work of the boys is according to the work of the men?—Yes.

6393. How long would you wish the boys to work?—Eight hours would be sufficient for the boys to work.

6394. And what would the men do after the boys were gone?—The men could do without the boys.

6395. In what way could the men do without the boys?—The men could work, if the boys did not work at all.

6396. Would they not in 10 or 11 hours be cutting a great deal of coal more than the boys could help to carry away in eight hours?—No; a man carries the most of the coal that he cuts himself, and the boys drag the small coal, or do something like that.

6397. The boys help in taking away the coal?—Yes.

6398. Do not they drive ponies?—No.

6399. The man who cuts the coal also brings it to the tram in the collieries you speak of; is that what you mean?—Yes.

6400. And they do not use the boys under 14 to drive the horses, as I understand you?—No, they do not.

6401. Therefore, you say that in the mines of which you speak you might reduce the time of the boys to eight hours without shortening the time of the men?—Yes.

6402. Could you do it without making it necessary for the owner to employ more men?—He would be required to employ more men.

6403. For every dozen boys that left off work, how many men would he want to take their place?—Perhaps he might need to have two men more; according to the quantity of work.

6404. Letting the boys out after eight hours would require the employment of some additional number of men?—Yes.

6405. Are there any women employed about there?—No, we quite prohibit the employment of women at all.

6406. How long have they ceased to employ women?—They have never been employed in that neighbourhood, to my knowledge.

6407. Is that because the masters will not employ them, or because their husbands and fathers will not allow them to work?—If the masters wished to employ them the colliers would not allow it in the neighbourhood where I reside.

6408. That is their decided feeling?—Yes.

6409. Are you well off for schools in that neighbourhood?—Yes, there are very good schools.

6410. Do the boys under 12 go there at present?—Yes, a good many do, and others do not.

6411. You have not a great many, you say, under 12 in the mine, but those that are under 12 go to school?—Yes, some of them.

6412. Have they been to school more in the last six months than before?—Yes, they have been obliged to go.

6413. Have you ever heard a talk in that country about this Committee sitting?—Yes; I heard a talk about it a fortnight ago.

6414. Mr. *Clive.*] You say that the boys work with their parents?—Yes.

6415. Would the parents like their being limited to eight hours work?—I am a parent, and I should like it.

6416. How old is your eldest boy?—He is 19 years of age.

6417. And the youngest?—Six years old.

6418. He is not in the mine, I suppose?—No.

6419. How old is the youngest you have in the mine?—14 years; over 14.

6420. Can he read and write?—Yes.

6421. Has he been to school?—Yes.

6422. When did he begin to go to school?—When he was six years old.

6423. Does he keep on with the schooling now?—Yes.

6424. What school does he go to?—A night school.

6425. Do you find that he is able to carry that on?—Sometimes he is not able to do it; he falls asleep.

6426. You think that it is bad for boys to work more than eight hours, you say?—Yes.

6427. And you also think it bad to allow women to work?—Yes.

6428. And you employ no women?—No, we do not employ any women.

6429. Then why do you allow boys to work?—I have not any boy under 14 at work.

6430. If you had a boy under 14 years of age would you say that he should not work more than eight hours?—I would not let him work more than eight hours?—I have a boy under 12, and he shall not work more than eight hours until he is 14.

6431. Mr. *Liddell.*] In the event of the boys working only eight hours, do you propose that they should earn the same amount of wages that they earn now for 12 hours' work?—It is impossible that they should do so, because they work for their parents.

6432. Then they will earn less wages?—Yes.

6433. Do you think that the parents would like that?—Yes, of course they would.

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6434. They would sacrifice their wages, you think, for the sake of their education?—Yes.

6435. Mr. *Greenall.*] At what age did your boys go into the colliery?—My eldest boy went into the colliery about nine years old.

6436. Could he read and write when he went in?—Yes.

6437. Has he worked from the time he was nine years old to the present time?—Yes; and he continues at school.

6438. What age is he now?—He is 19.

6439. How much does he earn?—He earns as much as myself; from 4*s.* to 5*s.* a-day, more or less.

6440. What is the age of your next boy?—Seventeen.

6441. At what age did he go in the mine?—Eleven years of age.

6442. What does he earn?—Three parts of what the other boy earns; if the other boy earned 1*l.* he would earn 15*s.*

6443. And your next boy, what age is he?—Fourteen; he works with myself.

6444. At what age did he begin?—He was not in work till he was nearly 13 years of age.

6445. What does he earn?—Two parts of my own earnings; about 10*s.* a-week.

6446. You have known instances of boys that are industrious going to the evening school?—Yes; I have been paying lately 8*s.* a month for my boys' schooling.

6447. Do I rightly understand you to say this, that with your present feeling about boys going into the colliery, if your time were to come over again, you would not allow your children to go in as early as they did?—No; never.

6448. Do you consider that your children have received any injury by going in so early?—No; because they did not work with others but with myself, and I took more care of them; but if they had worked with others, they might have received a great deal of injury; there is a great difference between their working with parents, who look after them, and working with others.

6449. With your present light, and with your present feelings, you would not do it again, you say?—No.

6450. Mr. *Clive.*] Taking the case of that boy of yours who went in when he was nine years old, is he any the worse for it now?—No.

6451. Did he work 11 hours a-day at that time?—No; because I left him at home many days, and he did not come near the work.

6452. You gave him holidays, I suppose?—Yes, I did.

6453. Mr. *Liddell.*] Is there not a great advantage, in your opinion, in a boy, provided he can get a certain amount of education, also learning his trade as soon as possible?—Yes, when he becomes able to learn it.

6454. But you think that it is no great advantage to him to learn it under 12 years of age?—No; it is a disadvantage, I call it, altogether, because it injures his health.

6455. Mr. *Greenall.*] I understand you to say that your children are not injured in their health?—I have said so; I gave them holidays occasionally.

6456. Mr. *Vivian.*] You say that the parents employ their own children; if they did not employ their own children, would they have to pay the boys that they employed?—Yes; they would then have to pay the children of other people; it is generally the case that a man and a boy work in the stall, and when that is the case, the man has got the advantage, by that means, over what he would have if there were two men; now, if my eldest boy were unable to work in the stall where he now works along with his brother, I should be obliged to put his younger brother with others, and then it would be an advantage to others.

6457. You think that the boys remain too long in the pit, as I understand you?—I do.

6458. Does not it rest with the men who employ them to decide the question as to how long they shall remain in the pit?—Yes.

6459. It is not, therefore, a question which either the masters or the Legislature are responsible for, if it rests with the men who employ them?—No; but still, in respect of this, what we require, I think, is, that the Legislature should look into the affairs of the boys at the present time. As far as what I have spoken goes, I wish myself that boys should not go into the mine till they were 12 years of age, and I wish that the Legislature should say that it will be so as a fact. I prefer that very much; that is to say, for the population of the country in general, and especially for the coal.

6460. Then you would wish the Legislature to enact that no boy shall commence work in a colliery before he is 12 years old?—Yes.

6461. And then, that his hours of work should be limited from the age of 12 to the age of 14?—Yes, to eight hours.

6462. But, supposing that you are yourself employing your own boys, does it not lie with you to send them home when you please?—Yes.

6463. Consequently, is legislation necessary when it lies with your own will to shorten the boys' hours of labour?—It lies in my own power with my own children; but, as for others, it does not.

6464. But, if you were employing a boy, you could have one boy in for eight hours and another in for four hours, could you not?—I would not work 12 hours myself.

6465. But, whatever length of time you might work yourself, you could allow the boy who was working with you to remain longer or shorter?—Yes.

6466. Do you see any reason why such legislation as you propose should be adopted, in the case of boys in collieries, and not in the case of all other boys?—I see now that the Legislature interferes between the ages of 10 to 12, and why should it not from 12 to 14.

6467. That is not quite an answer to my question: why should the age at which boys work be limited in a colliery, and not in all other occupations?—Because their occupation is more confined in collieries than in any other occupations; I believe that a boy by being underground for eight hours, is affected more than if he were overground for 12.

6468. I dare say that you have been through an iron works, in your time?—Yes.

6469. And you have seen the boys employed in an iron works?—Yes.

6470. Do you think that they are better off than the boys employed in collieries?—I cannot say.

6471. They are exposed to great heat, are they not?—Yes, I think they are.

6472. Do you think that the boys are more affected by the work which they have in collieries than those boys are who are exposed to that heat?—I do not know; if they do not inquire after it, it is useless for me to do so.

6473. You

6473. You are speaking as a collier, in fact?—Yes; I believe that a boy by being underground for eight hours, is more affected than if he were over-ground for 12 hours.

6474. Do you think that work in a colliery takes more effect upon him than if he stood opposite to a furnace for some hours?—I cannot say; I never stood opposite to a furnace myself.

6475. Would you legislate for collieries only, in this respect?—Yes.

6476. Do not you think that that would have the effect of inducing parents to send their boys to other trades, and not to collieries?—No.

6477. You do not know cases then where that occurs?—No.

6478. Are there no iron works in the Rhondda Valley?—No.

6479. Do you know any parts of South Wales besides the Rhondda Valley?—I know the Aberdare Valley.

6480. Have you ever worked there?—No.

6481. Then you do not know how it is as regards the employment of labour there?—No.

6482. *Chairman.*] You leave the workmen in other trades to take care of themselves?—I do.

6483. You do not know about their trades, and you do not give any opinion about them?—I do not.

6484. You know about the colliery trade, and you give an opinion about that?—Yes.

6485. And whether it would be right to do the same thing for other trades is a question which you have not considered?—They should look to that themselves, I think.

6486. Mr. *Greenall.*] Are you in a union?—No.

6487. Have you ever been in a union?—No; we did try to organise ourselves, but we saw it was useless, and it went all abroad.

6488. Mr. *Liddell.*] You say that you tried to combine, and that it was useless; why was it useless?—The men would not come together; they would rather be astray than do any good for themselves.

6489. The men disapproved of it, in fact, and would not join?—Yes.

6490. *Chairman.*] Is the ventilation in a satisfactory state in the district from which you come?—In some places it is, but in others not.

6491. Where there is any defect what is the nature of the defect; is it from want of sufficient furnace power or from want of sufficient air-ways?—It is from want of sufficient air-ways.

6492. Is there ventilation by furnace?—Yes.

6493. There is a double shaft in all the mines, I suppose?—Yes.

6494. But there is in some cases a want of sufficient air-ways?—Yes.

6495. Is there want of furnace power in any cases?—No, I believe it is more the want of air-ways.

6496. How are the air-ways made in your district?—In different ways; but there is many a stall worked for 50 or 60 yards, and with no wind-way to it; nothing but the weight of air that will follow to it. In some places they drive stall headings, and we keep a goaf on one side and a road on the other, and there is six or eight feet of air-way between the goaf and the road, and there are two walls made on the inner side of the wind-way, and these two walls are built up with small coal and made air-tight. In other places that is neglected, and is not built at all, so that it is not air-tight.

6497. Then the defective ventilation in your district would be owing, as I understand you, to not keeping the partition air-tight?—Yes.

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6498. The partition is made up of loose stuff, is it?—Yes.

6499. And it is not built up and filled in properly in those cases?—No, not made air-tight.

6500. Where there is deficient ventilation are you liable to explosion?—No, very little. No. 1 and No. 2 are not fiery veins, but still in some places fire has occurred.

6501. Still they are not what are called fiery mines?—No.

6502. You are more liable to black damp?—Yes.

6503. Have you noticed men suffer much in their health from working in that?—Yes, I have.

6504. At what age do men who have had that kind of work become broken down?—I have seen a man who was only 30 years of age, and you might have taken him for almost 50, he was so asthmatical from having worked in bad air.

6505. Are they generally obliged to have the lights horizontal?—I have worked myself for some time, though not very long, with the candle all on one side till the grease would be running from it, and if you put it upright it would not burn at all.

6506. When was that?—About six years ago.

6507. Was that where you are now?—No.

6508. How long have you been in your present place?—I have worked where I am now 10 years.

6509. Then you were for a time working in another pit?—I worked four years in the Cymmer Pit where that great explosion was, and from the Cymmer I went to the pit where I am now; they are two adjoining pits.

6510. It is not the same colliery, is it?—It is not the same colliery, but the same vein.

6511. What do you call the vein?—No. 3.

6512. Were you at the Cymmer Pit when the explosion occurred?—No, I was working where I am working now.

6513. You say that, generally, taking the district throughout, the ventilation is not sufficiently attended to?—In some places it is not.

6514. Are there any cases in which it is sufficiently attended to?—There are some.

6515. Mr. *Bruce.*] Have you ever complained when the ventilation was insufficient to the inspector?—No, I never complained myself.

6516. Has anybody from your colliery done so?—I cannot say.

6517. If it has not been done, why has it not been done?—The result would be in many places, in case they found out who did complain, that that man would be required no more.

6518. But does the inspector always inform the master who it is that sent him the request?—I have been told so. But, however, besides that, the inspector, before he comes to visit a colliery, sends information to that colliery, which, I should think, he ought not to do; he ought to come unawares.

6519. Is it generally the case that he sends word beforehand?—As far as I can understand, it is.

6520. You say that the defective ventilation usually arises from a defect in the air-ways?—Yes.

6521. The master would not be able to put the air-ways right in a few days, even if he knew that the inspector was coming, would he?—No, but he could make a great improvement.

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6522. Would it not be competent to any one to point out what improvement he had made in those few days?—They dare not do it.

6523. Are the workmen so much afraid of the masters in that part of the country that they are afraid to speak out?—Yes.

6524. Can you say whether there is any difficulty in getting labour in that part of the country?—There is no difficulty in getting labour in the colliery where I reside.

6525. You have not heard that the masters find great difficulty in getting a sufficient number of hands to work?—No.

6526. What steps would you suggest in order to improve the ventilation?— That the wind-ways should be carried in a proper manner.

6527. Who is to see to them?—The inspector, of course.

6528. I want you to explain to the Committee what measures you would take to secure a better ventilation by means of the inspection?—I should say that the inspector ought to look and see if the work is carried on in a proper manner, or not; and, if it is not, he should explain it to the master.

6529. Should the inspector do that without receiving any notice from the men that the ventilation was in a bad state?—I should prefer that there should be deputies, so that every colliery should be visited once a month, at least.

6530. Would not the effect of that be to make the inspector responsible for the state of the ventilation in the mine, and not the owner of the mine?—Not the least.

6531. If it was his duty, or his deputy's duty, to visit every colliery, surely he, or the Government through him, would be responsible for the ventilation of the mine?—No. I should say that it was the deputy's duty to visit the place, and if there was anything wrong then he ought to charge the master, and if the master would not put it right, then, of course, the master ought to be visited with a fine, or something similar.

6532. But in every case when an explosion happened, and it was proved that the ventilation was deficient, the fault would be thrown, would it not, upon the inspector, for not having called the master's attention to it?—No, I think not; because after an explosion occurs it cannot be proved at all. After the explosion the inspector makes a visit and tries to find out what the cause was. If the inspector came beforehand, and it was dangerous, he ought to charge the master that it was not in a proper state.

6533. But suppose that after an explosion has taken place, evidence is given showing what was the state of the colliery beforehand, and that the evidence then given shows that the ventilation was not sufficient; that was the case in the Cymmer Pit, was it not?—Yes.

6534. Then, in those cases, according to you, the inspector would be responsible if he had given no notice to the master that the ventilation was not sufficient?—If he had given notice to the master, then the master ought to be liable.

6535. Does it not come to this, that the Government, through the inspectors, are to be held responsible for the efficiency of the ventilation in every colliery in the country?—I should say not.

6536. Mr. *Vivian.*] You say that the ventilation in some places is defective owing to deficient air-ways?—Yes.

6537. In what mines?—In No. 1 and No. 2.

6538. Those are veins rather than mines, are they not?—Yes.

6539. What collieries are those?—There is Mr. Hollway's Colliery, Cwms Cwrt.

6540. Any other?—Yes; I have been informed that the Ynisewyr Colliery is in a bad state.

6541. Are there furnaces in those pits?—One is a level, and the other is a pit. I believe there is a furnace to the level, but I am not certain.

6542. There is no high up-cast in that case, I suppose?—I am not certain whether there is or not.

6543. You know nothing of your own knowledge, but you are informed that it is so?—I am informed so.

6544. In the case of the pit, is there a furnace in that pit?—Yes.

6545. What quantity of coal is got from that pit daily, do you know?—I dare say about 100 tons a day

6546. Have you ever been down that pit?—No, never.

6547. Then your information is simply derived from what you hear?—Yes. That is a fiery vein. They work by the locket-lamp, and they trust to the lamps more than they do to the wind-ways.

6548. Do you know whether the inspector has inspected that mine?—I do not know that.

6549. You have not heard from the men whether the inspector has or has not inspected that mine?—No.

6550. But you have heard from the men that the ventilation is insufficient?—Yes; and I have heard them say this, that sometimes when they have taken water in, in a jug for their meals, perhaps in a few hours that water has become heated.

6551. Are the air-ways insufficient in the Troedrhiw Pit?—No.

6552. Were they in the Cymmer Pit when you worked there?—No.

6553. Then you cannot say from your own knowledge that the pits are badly ventilated, but only from what you hear?—From what I hear.

6554. You say that the master might make a great improvement in the state of the pit between the time of his receiving notice that the inspector was coming and the actual time when the inspector came; what time would elapse?—Three or four days it might be.

6555. What improvements could be made in that time?—He might put 10 or a dozen men at work, and make a great deal of improvement.

6556. Who do you think chiefly suffers when anything goes wrong in the mine?—In case an explosion occurs, or in case of deficiency of air, the men suffer more than any one else.

6557. Do not you think that it is a serious thing for the master when an explosion occurs?—Yes.

6558. And do you think that for the sake of saving the work of a few men he would neglect any provision for their safety?—I believe that the masters many times are not aware of the state of the workings; but the deputies try to work as cheap as they can to please their masters, that they may have a good name with them.

6559. You mean by "deputy" the overman, do you not?—He has deputies under him.

6560. Who manages the Troedrhiw Colliery Company?—Mr. James Thomas, who is one of the proprietors; he is the overman himself. No one else is allowed to give work to any one, or to dismiss any one.

6561. He

6561. He has under him a deputy, I suppose?—Yes.

6562. And Mr. Thomas is at the same time one of the owners, you say?—Yes.

6563. Do you think that he would be so short-sighted to his own interest as for the sake of saving the labour of the men to endanger the mine in any way?—He is not.

6564. That is what you know of your own knowledge?—Yes.

6565. And, in reference to those cases in which you think that the master would employ some men to set the matter right before the inspector came, that I suppose, is imagination?—Yes.

6566. Have you ever seen the inspector at your pit?—Never.

6567. Have you known of his visiting places in the neighbourhood?—I have been told that he has been at two different places in the Rhondda Valley; I believe that the inspector has been once in 16 years where I am working now.

6568. But you consider that the ventilation is sufficient?—Yes, I do, because we work by naked lights.

6569. Is it a fiery mine?—Yes; it is the mine or the same vein where the great explosion occurred; it is the next pit to it.

6570. *Chairman.*] The ventilation is so good in your mine that you are able to work with naked lights, although it is the same vein in which the explosion took place?—Yes.

6571. Mr. *Vivian.*] Do you think it desirable to work with naked lights in a fiery mine?—Yes.

6572. You think it convenient, I dare say?—I think it more convenient than with lamps.

6573. But do you think it is a wise thing to work with naked lights?—I do.

6574. *Chairman.*] How long have you worked with naked lights in this mine?—I have always worked with naked lights in this mine.

6575. How long is it since there has been an accident from an explosion?—There has been no explosion at all.

6576. You are liable to accidents from other causes, besides explosions, are you not?—Yes.

6577. From what causes are you liable to them, in your mind?—From the falls of the roof.

6578. Are you liable to frequent falls of the roof?—Very few accidents have ever occurred in that pit.

6579. Are you sufficiently supplied with timber for props?—Yes; they are always cut up as required.

6580. Is that generally so in the district?—Yes, in the neighbourhood.

6581. Is the timber brought to the men at their work?—They have to carry it about 40 or 50 yards; the men have to cut the timber on the top of the pit, and then it is brought to them.

6582. Are you liable to accidents in the engine planes?—No, it is a balance pit, and we have to trust to the chain, of course.

6583. Mr. *Vivian.*] That pit is worked by a chain, then?—Yes, a four-linked chain.

6584. Mr. *Clive.*] Do you think that the inspector would allow you to work in a fiery mine with a naked light?—Yes.

6585. *Chairman.*] You are not liable to accidents from being crushed by the trucks going along the tramway?—No.

6586. The ways are sufficiently wide for that?—Yes, in most places.

6587. Have you the proper recesses provided?—Yes.

6588. There is a rule which states that places of refuge are to be provided every 20 yards?—Yes; it is generally the custom that one horse draws three trams, and the trams are hooked to each other, and some men prefer running the risk of catching hold of these hooks to taking the trouble to walk out. I never do that, but some get injured in that way.

6589. That is caused by their own carelessness?—Yes.

6590. It is not from the want of places of refuge?—No.

6591. Are those places of refuge provided every 20 yards?—The main level is broad enough all along; it does not matter where it is.

6592. You are not liable to accident by being crushed, therefore, against the sides of the ways?—No.

6593. Mr. *Liddell.*] In reference to working in a fiery mine with naked lights, you say that you prefer it?—Yes.

6594. And you think that the inspector would prefer it also?—He does prefer it.

6595. Does your own inspector prefer it?—Yes, Mr. Wades.

6596. How do you know that he approves of it?—It was proved, after the explosion, that the work could be done with naked lights, and it has been worked so ever since.

6597. Do I rightly understand that, if you are enabled to work by naked lights, you are quite sure that the ventilation is sufficient, and that that is the reason why you prefer it?—Yes, that is the reason.

6598. Does the naked light detect the presence of the inflammable gas quicker than the lantern?—Yes.

6599. It is sooner affected by the presence of the gas than the lantern?—Yes.

6600. And in that sense you prefer it?—Yes, especially where there is a sufficient current of air.

6601. But I understand that the reason why you prefer the use of a naked light is, that you are then perfectly satisfied whether there is a sufficient amount of ventilation by the appearance of the candle?—That is the truth.

6602. Supposing that a displacement of gas took place, might you not, with even an adequate amount of ventilation, be liable to an accident if you were working with a naked light?—I have never seen anything of the sort.

6603. Have you ever heard of anything of the sort?—I have heard that people do say that, but I do not believe all that people say.

6604. Your own experience leads you to believe that in a properly ventilated mine no displacement of gas would be sufficient to cause an accident?—It would not.

6605. Sir *Philip Egerton.*] Do you work by means of blasting in your mine?—Yes, we have a deal of blasting.

6606. Have you had any accident from blasting?—Yes; I have seen accidents from blasting, but I never had one myself.

6607. How have those accidents arisen?—I believe that some have arisen through the men not being capable of using powder; they professed to be capable, but they were not.

6608. They were incautious workmen?—Yes.

6609. What description of tamping-rods and prickers do you use; iron or copper?—Iron.

6610. What material do you use for tamping or for filling the holes?—It is generally the borings of the hole, either the rock or the cliff.

6611. Is

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6611. Is it grit?—Yes.

6612. Will it strike fire with steel?—Yes.

6613. Have you known any accident occurring in consequence of a spark from the grit?—Yes; I knew a person at Cymmer who lost his life in that way.

6614. Have you ever seen copper tamping rods?—Yes.

6615. Do not you think that they would be much safer?—Yes.

6616. Have you known the powder smoke to remain a long while after the blasting?—Yes; I have known it to remain as long as 12 hours.

6617. Have you ever known any experiments to be tried with gun cotton to obviate that powder smoke?—No.

6618. Mr. *Liddell.*] If there were a larger mixture of inflammable gas than there ought to be, I suppose that the candle would begin to sparkle and flicker?—You would see it jumping.

6619. If you observed that you would immediately put the light out, would you not?—I should draw back immediately.

6620. And of course you would represent it to the fireman, and the ventilation would be attended to?—Of course.

6621. That is another reason then why you prefer working with the naked light, is it not?—It is generally the case now in the different mines, that if there is inflammable gas when the fireman goes into the place in the morning the men go in with their lamps locked; these firemen and deputies trust more to the lamps than they do to the wind ways.

6622. And the lamp is not so safe an indicator, is it, of the danger?—It is a safer indicator to go into inflammable gas.

6623. Supposing that there were a large amount of inflammable gas displaced, and that you went in with a candle, you would find it out at once?—I should never attempt it.

6624. Then you would always insist, I suppose, upon the fireman going in with the lamp first?—The first thing in the morning the fireman in the fiery veins has to go round every stall in the workings, and then he has to put a naked light in these workings, either a candle or a lamp; there is oil provided by the company, and he should leave one of those behind; then if there is any danger in his putting a naked light there the fireman is in the danger himself.

6625. You think it better to sacrifice the fireman than to sacrifice the men, in fact?—Of course; he has to fulfil his duty, and if he does not he should be the one to suffer by it.

6626. Mr. *Vivian.*] You say that a candle is sooner affected than a lamp, what do you mean by that?—If a person takes a candle into a stall where this inflammable gas is, he is in more danger.

6627. Then it is the person that is sooner affected and not the candle, is it not?—The person.

6628. Because the person is blown up?—Yes; but, as I stated, it is the general case that the fireman has to do his duty in the morning, and to put the naked light in the stall, if the stall is in a fit state for the men to work in.

6629. And you would prefer always working with a naked light, would you?—I would.

6630. But do not you think that it adds additional security to a fiery mine if no naked lights whatever are allowed in that mine, the ventilation being as good in the one case as in the other?—If the ventilation was good, no explosion would occur.

6631. But would it not add to the safety if, besides providing for a sufficiency of ventilation, you did not allow a naked light to go into the mine at all?—It would add to the safety, of course, but too much dependence is placed upon these safety lamps.

6632. My question is not whether a mine ought to be badly ventilated because it is entered with safety lamps, but whether, if it is well ventilated, and you add the provision of safety lamps, that mine would not be safer?—Yes.

6633. Sir *Philip Egerton.*] But when shots are fired, they could not be fired without a naked light?—No.

6634. Mr. *Vivian.*] Where safety lamps are not used in a fiery mine, where they blast, men are specially appointed to go to the place beforehand, and see that it is safe for them to fire it?—Yes.

6635. Are all parts of the stall exactly the same in reference to the gas confined in them?—No.

6636. I presume that the upper portion might fire, when the lower portion would not?—Yes.

6637. So that the higher your light rises in the stall the greater the danger of explosion?—Of course when the gas resides there.

6638. Have you ever worked with a top upon your candle?—No.

6639. Would you not rather work with a lamp, than with a naked light when there was a top upon your candle?—I could imagine that I should know very well when it was necessary to cease working.

6640. That is to say, it is a matter of your own judgment as to what point it will explode at?—Yes.

6641. In your own judgment, would it not be safer to work with a lamp than it would be to work with a naked light during the time when there was a top upon the candle, inasmuch as when you are working with a top upon your candle, it is just a question of how long it will be before the gas will fire?—When I saw the top on the candle, and saw that there was a dangerous amount of gas there, I should leave the place immediately.

6642. You are a careful man, but we will take the case of a careless man who would not look at the top upon his candle, might he not endanger the lives of other men besides his own?—Yes.

6643. Therefore, I ask, is it not safer, in fiery mines, to work with safety lamps?—Yes; it is safer of course, but it is often much worse for the men who work by the Davy lamps; I have known them half blinded after working with them.

6644. You say that you do not like the lamps to work with?—To take the general run of places that I do work in, that is to say, stalls where the ventilation ought to be good, I never will work with a lamp; where the windway was insufficient, I would for a certain time.

6645. *Chairman.*] In the course of your experience of mines, have you ever known what they call a great outburst of gas?—Yes.

6646. Do you mean by an "outburst," the same as a "blower?"—Yes; they are the same thing.

6647. A blower sometimes comes through a small crack, does it not?—Yes.

6648. The outburst that I was speaking of is an

an outburst that upheaves the floor of the road and breaks through it; have you ever known such a case?—I have never seen it.

6649. But you have seen a blower, have you not?—Yes.

6650. Have you ever seen the gas come out in such quantity from blowers that it could not be carried away by ventilation?—No.

6651. You have heard of great outbursts of gas, have you not, distinct from blowers?—No.

6652. Mr. *Clive.*] When you speak of men being half blinded by the lamps, do you mean the Davy lamps or the Stephenson lamps?—The Davy lamps; it might be either one or the other.

6653. How is it that they are blinded?—Because it affects their eyes; the light is not sufficient.

6654. Mr. *Liddell.*] Do I rightly understand that one reason why you prefer to use the naked light rather than the Davy lamp, is that in places where the naked light is used more pains are taken to make the ventilation perfect than in those places where the Davy lamp is used?—Yes, a deal more.

6655. *Chairman.*] Are there any other points which you would like to give evidence upon?—I should like to speak on the subject of the coroners' courts and inquests.

6656. What complaint have you to make upon that head?—I should prefer that at all times there should be a certain number of miners on the inquest, who would be able to state what the other jurymen, who might be shopkeepers, shoemakers, tailors, and so on, would be unaware of themselves.

6657. Have you known verdicts that have given dissatisfaction to the workmen?—There is a deal of talk about them; I have been on several inquests myself, and I have heard several complaints.

6658. You mean that you have been on them as a juryman, I suppose?—Yes.

6659. Then they do occasionally summon working miners?—Yes; I have been summoned myself as a working miner.

6660. Is it a common thing for them to summon working miners?—The policeman looks round, and summons anyone that he thinks fit.

6661. Then there is no system of excluding working miners from the jury?—No.

6662. How many working miners would there commonly be upon the jury?—Sometimes there is no miner at all on it.

6663. And you would make it necessary, as I understand you, to have some miners always on the jury?—Yes.

6664. But you have not known any great dissatisfaction at any particular verdict, have you?—Yes; I have heard a deal of complaint.

6665. Do you remember the inquest upon those who were killed by that great accident at the Cymmer Colliery?—Yes.

6666. What was the verdict in that case?—Manslaughter.

6667. Manslaughter against whom?—Against the overman and the fireman.

6668. Were they tried for it afterwards?—Yes.

6669. And were they convicted?—No; they were bailed out until the assizes, and then they got free.

6670. Were they tried at the assizes there?—Yes; they were tried at Swansea.

6671. Do you remember whether or not the bill was thrown out by the grand jury?—I believe there was a true bill brought in against three out of the four by the grand jury.

6672. All those that were tried were acquitted, were they not?—Yes.

6673. Then the fault in that case was not with the coroner's jury?—No; there were miners on that inquest. Perhaps I may be allowed to explain what happened before that explosion. It so happened that before this explosion occurred there was a certain overman, whose name was William Miles, who emigrated to Australia, and there was another overman put in his place. In the time of this overman there were two firemen that were very much liked by the colliers; but in a little time after this overman was appointed these two firemen had to leave. The colliers at that time stood out for about six weeks, insisting that the old firemen should remain in the position which they had occupied, but they did not remain in it. These men that stood out for a time were forced to submit, because their circumstances were poor, and they could not wait any longer; then there were other firemen put in the place of those who had been sent away. These new firemen were a brother and a brother-in-law, and some other relation of the overman; the result was that both these men (it was true of one of them especially) who were put as firemen, I believe had never seen a lamp before then, and they were not acquainted at all with fiery mines.

6674. Mr. *Liddell.*] Then the upshot of that, as I understand it, is that you want to prove to the Committee two things; one is that these firemen were inexperienced men, and the other is that they were appointed by favouritism, on the part of the overman?—Yes.

6675. And that, consequently, the accident occurred through their want of experience, and that blame attached to the overman on account of his having favoured his own relations, being inexperienced men?—That is it.

6676. Did that come out on the inquiry at the time?—No, it did not.

6677. Mr. *Bruce.*] How would you prevent favouritism?—Men ought to be tested, I think, in order to see whether they are capable for their duties.

6678. Who is to test them?—Some practical man.

6679. Appointed by whom?—By the Government.

6680. Would you carry that into every trade?—I should prefer it myself.

6681. You would say that the Government should examine everybody, in every trade, to see whether he was fit for his work?—Yes, especially firemen.

6682. Mr. *Powell.*] I have observed in the papers, during the last 48 hours, that the Government of Paris have passed a law that no man shall be allowed to drive a public vehicle in Paris who has not undergone a public examination in driving, and received a certificate from the police; would you extend that to the workings of coal mines?—No; because there is very little driving that we have; we do not require it at all.

6683. But you think, as I understand you, that those who have the management of the working of mines ought to obtain a certificate from some public authority, showing that they are competent to discharge their duties?—I think so.

6684. With regard to inquests, a previous

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witness has taken objection to the absence from coroners' inquests of practical miners; should you be willing to have upon inquests, where accidents had arisen in collieries, those practically acquainted with mining, yet who were not working colliers; but, on the contrary, for instance, overlookers or underlookers, or other men who were immediately in the employ of the masters?—It does not matter who it is, if only they are competent men to sit on an inquest, and understand what is carried on in a mine.

6685. Then your complaint would not be against overlookers or those employed in the management of mines being on the inquest, but simply against those who have no knowledge of the subject?—I should object to an overlooker sitting on an inquest.

6686. But he would be a practical man, and would be acquainted with the working of a mine, would he not?—Yes; but he would rather please his master than speak the truth.

6687. If you desire the introduction of the ingredient of a certain number of working miners into the jury on the ground that they would be favourable to the men, why should you object to the introduction of another ingredient in the shape of overmen who are no less practical men, and who would be inclined, you say, to the master's side?—I should object to them, because they would rather please their masters than speak the truth.

6688. But if those men would be likely, in order to please their masters, to act from any improper motives on the jury, why should not the other class of working miners commit the same fault to please their fellow workmen?—Because there is not the same interest in the case of the working miners, but the overman gets the interest of his master by pleasing him.

6689. But does not the workman in the same way get the interest of his fellow workmen?—No; it is no interest to him to speak the truth; he benefits nothing by it; but the overman does benefit by not speaking the truth. The master says to him, perhaps, "I shall think of you another time."

6690. Does not the working miner value his good name among his fellow workmen?—Yes; he values it, but he benefits nothing by his good name.

6691. Mr. *Greenall.*] Would you have the firemen appointed by the inspector?—Whether they were appointed by the inspector or the master, or by whomsoever they were appointed, I would say that they should be examined by the inspector in any case.

6692. The fireman having been appointed, then, before he entered on his work, you would have him examined by the inspector you mean?—Yes.

6693. And whom would you wish to appoint the inspector?—The Government, of course.

6694. Mr. *Hussey Vivian.*] What do you think is the interest of the master in causing an explosion?—No interest at all.

6695. What do you think is his interest in employing bad men, men who are incompetent, about him?—There is many a man employed by the agent whom the master is not aware of; the master does not know whether he is capable of fulfilling the situation he is in or not.

6696. Then you think, do you, that the masters are generally neglectful in regard to the men that are under them?—I believe that has been the case, and I believe that was the chief cause of the accident at Cymmer when that explosion occurred.

6697. Do you think that, as a general rule, masters are neglectful as to their choice of the agents whom they employ?—No; I believe that they are more careful now than they have been.

6698. You think that they have benefited by experience, then?—Yes.

6699. Do not you think that you can safely leave it to the masters to look after their own interests to choose proper men to act for them. Do not you think, in fact, that their interest is sufficiently strong to induce them to take steps to prevent any accident to their mines?—No, there are many masters that are ignorant of the mines; they could not test them themselves if they were asked to do it.

6700. And their superior agent, or the man who has charge of the pit, is also ignorant, is he; is that what you mean?—Sometimes that has been so.

6701. Does not it sometimes happen that that very man has been found guilty of manslaughter by the coroner's jury, and been tried at the assizes?—That has been the case.

6702. Do you think that a pleasant position for a man to be in?—Of course not.

6703. Do you think that a man in that situation is likely to neglect his duty, when he knows that that may be the consequence of his doing so?—In the future, perhaps, he would not.

6704. Then your evidence goes to the past and not to the future; is that what you mean?—It refers to the future, too.

6705. Do not you think that the position in which the agent would be likely to be placed, in the event of any explosion, would be a sufficient inducement to him to appoint good men under him?—Yes, in case they were tested.

6706. What would be the nature of the test that you would propose?—That the inspector should approve of the questions which he should put to the men; he should find out whether they were capable of attending to their duties or not.

6707. Would you test them in trying gas?—No, there need not be that.

6708. But is not that the most essential part of their duties?—Yes.

6709. Then the test which you would propose would not have regard to the chief part of the work of the man, namely, whether he could try the gas?—No; what I mean is this. The inspector is approved of by some one for the Government; if he were not tested and proved to be a capable man for these duties, he would not receive the office, and I should like the same thing done in the case of these firemen.

6710. I ask you what is the nature of the test which you would apply to a fireman in order to decide whether he was qualified or not for the duty?—I think that the inspector himself should test the men, and see whether they were qualified or not.

6711. In what way should the firemen be tested?—In the same way that an inspector is tested himself.

6712. Then you mean that every fireman should be equal to an inspector in his knowledge?—No, he ought to be tested by an inspector with reference to his knowledge of gas.

6713. You have just said, have you not, that you would not test the firemen in trying gas?—I would not have them tested in trying it by taking them

them into a mine where gas is, but I would have them tested in the same way as the inspector himself is tested. I would say, let the fireman, whoever he is who takes that office, be tested in the same way as the inspector is at present.

6714. Sir *Philip Egerton.*] You mean that he should be asked questions as to his knowledge and his fitness for the office which he was required to fill, do you not?—Yes.

6715. But not practical questions as to the composition of gas?—No.

6716. Mr. *Vivian.*] When I ask whether you would have the firemen tested in trying gas, I do not mean an examination as to the constituent parts of gas, but as to the point at which gas is dangerous or otherwise by the ordinary test of a light; would you require firemen to be so tested?—No, I would not wish it to go so far as that, but I would not object to it.

6717. What would be the test that you would have a fireman subjected to; should it be whether he could read and write?—The test should be that he should be able to answer the questions which the inspector asked him.

6718. What questions would you have the inspector ask him?—The inspector should ask those questions himself; it would be useless for us to attempt to put the very words in which the inspector is to examine the fireman; we leave that to the committee.

6719. *Chairman.*] Your idea is that there ought to be some test, but as to what the test should be, you would leave that to the Government entirely, as I understand you?—Yes.

6720. Mr. *Bruce.*] Would you have the Government examine all the agents as well as the fireman?—Yes, I would have the inspector examine them.

6721. You would wish that no person should be employed in a responsible situation in a colliery without being examined by a Government officer?—Yes, that is what I should wish.

6722. Mr. *Greenall.*] You say that you have been on coroners' juries?—Yes.

6723. How often have you served on them?—In three different cases.

6724. In any of those cases has there been any difference of opinion and dissatisfaction as to the verdict?—No.

6725. What was the verdict?—In each case the verdict was "accidental death."

6726. How many miners, besides yourself, were on the jury?—I think two or three.

6727. *Chairman.*] What is your system of accident clubs in that district?—We have an accident club belonging to the colliery.

6728. Is that a voluntary subscription club?—The money is kept in the office.

6729. Is that maintained by stoppages from the men?—Yes.

6730. Who manages that club?—Some of the workmen manage it.

6731. Is it managed entirely by the workmen?—Yes.

6732. The masters stop the money, as I understand you, in the office?—Yes, there is a committee of management picked out of the number of the workmen that work in the pit, and they can do as they wish with the money; they have to do the best they can with it.

6733. So that the master says, as I understand you, that every workman must pay towards it, but he hands over the money to the workmen themselves to manage?—Yes.

6734. Do you know of that being done in any other coal pits?—There are collieries where the masters have the whole control of the money.

6735. The men are satisfied with this system which prevails at your colliery, are they not?—Yes.

6736. What do the stoppages amount to?—Eightpence per month.

6737. Is that provision enough for cases of accident?—It has been; it will not pay for sickness; it is for nothing but accidents.

6738. The men have other clubs of their own, have they not?—Yes.

6739. What do they allow a man for an accident out of this fund?—If he meets with an accident from fire-damp and gets burnt, they allow him 10 *s.* a week for six months, at the colliery where I reside, and then he is put down to 5 *s.* a week for the other six months of the year, and then there is no further power.

6740. You mean that the case is then left to be dealt with according to the circumstances, and according to the fund?—Yes.

6741. But this club has not been in operation very long, as I understand you?—About nine months.

6742. So that you are not able to say whether the stoppage of 2 *d.* a week will be enough?—No; the fund has increased as yet.

6743. I think you have stated that the club, of which you have spoken, is merely an accident club?—Yes.

6744. But in the other clubs that the workmen have themselves, there is a provision for widows and children, I suppose?—No, there is a certain amount, when any one member of the club dies, given to the widow for the expenses of the burial and so on.

6745. Is there any other point on which you desire to give evidence to this Committee?—There is a great grievance about the weighing machines.

6746. You are paid by weight, are you?—Yes.

6747. Do you employ a check weighman?—No.

6748. How is it that you do not employ a check weighman?—There has not been one employed at all with us, and we rather fancy that the masters would not be willing that any should be employed.

6749. Have the masters ever objected to the employment of check weighman?—We have never inquired.

6750. What is the nature of the complaint that the workmen make in reference to the weight?—The workmen are ignorant of the machines themselves now, and it would be a great satisfaction to them if the inspectors of weights and measures, who are appointed by the Government at present, inspected the machines.

6751. The nature of the complaint then, as I understand you, is that the workmen are not satisfied with the correctness of the weighing machines, and that they wish to have their correctness tested by the regular inspector of weight and measures?—Yes.

6752. Is there any other point which you wish to bring before the Committee?—No.

Thursday, 17th May 1866.

MEMBERS PRESENT:

Mr. Clive.	Mr. Kinnaird.
General Dunne.	Mr. Neate.
Sir Philip Egerton.	Mr. Woods.
Mr. William Orme Foster.	

CHARLES NEATE, Esq., IN THE CHAIR.

Mr. ALEXANDER M'DONALD, called in; and Examined.

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6753. *Chairman.*] WHAT are you?—I am Acting Secretary to the Miners' Association of Scotland.

6754. What were you before you took that situation?—A miner.

6755. You have been a working miner, have you?—I was in the mines at eight years of age.

6756. And how long were you a working miner?—Fully 18 years.

6757. Where did you work?—In Lanarkshire.

6758. Always in Lanarkshire?—Always in Lanarkshire.

6759. Have you worked mostly in the same mine?—No; in several coal mines.

6760. What were the different mines in which you did work?—I worked in a mine called Drum Gray, Ardrie Hill, Drum Shangie, Darn Gavel, Mavis Bank, and sundry other mines.

6761. What is the last mine in which you worked?—Drum Gray.

6762. And how long have you worked there?—I worked about six months in that mine; I worked during the vacation of the session of Glasgow College, 1849, where I had been the previous session.

6763. What is the mine in which you have worked longest?—Drum Shangie.

6764. How long have you worked there?—About two years and a half.

6765. Are these mines mostly of the same character?—Drum Shangie was an ironstone mine.

6766. Were they mostly of the same character; I mean as to management?—Yes, mostly.

6767. What is true of one, therefore, is true of another?—Yes.

6768. Are they mines belonging to private proprietors, or to companies?—To companies, all of them, with one exception.

6769. What is the exception?—Drum Gray coal.

6770. To whom does that belong?—It is exhausted now; I may mention that I also had the management of mines for a time.

6771. As overman, do you mean?—As underground overman, and as above-ground overman.

6772. Of which mine had you the management?—A mine belonging to the Langloan Iron Company.

6773. You never had the management of a coal mine, but only of an ironstone mine, is that so?—Yes.

6774. What are the chief points upon which you wish to give evidence to the Committee?—First, upon the Inspection Act.

6775. The Inspection Act includes almost all the points, does it not?—Yes, but there is another point which has not been before the Committee much, the question of truck; also, upon the question of the special rules I should like to give evidence.

6776. What are the points in the Inspection Act to which you wish to call the attention of the Committee?—One great point is the subject of the inspection itself, as being insufficient.

6777. In what respect is the insufficiency chiefly shown?—In the want of attention, or the inability, I think rather, of the inspectors to overtake the work.

6778. A want in the number of inspectors, you mean?—Yes.

6779. The two main points to which the inspectors have to look are the employment of boys and the safety of the mines, are they not?—Yes.

6780. As to the employment of boys, what have you to say upon that subject?—I think that the Act is not sufficiently carried out in that respect.

6781. Is it the practice to employ boys under 12 in Scotland at all?—Yes.

6782. Is it a common practice?—It is a common practice to employ them between 12 and 10 years of age.

6783. When you say that it is a common practice, what proportion to the men employed would the number of boys under 12 years of age bear?—I could not say definitely.

6784. Would it be 10 to every 100?—Yes; I think it would be more than that.

6785. Are the requirements of the Act as to certificates attended to?—I am afraid not.

6786. Have you reason to know that they are not?—Yes, I have reason to know that.

6787. Have you yourself spoken to boys and found that they could not read?—I have spoken to boys and found that they could not read, and yet they were in a mine.

6788. Have you also asked whether they have been

been required to produce certificates?—Yes, I have.

6789. And according to the best of your information you think that they have not been required to produce certificates?—Yes, and I have communicated that information that I have obtained from time to time to the inspectors.

6790. Have the inspectors attended to the matter?—In some instances they have done so; I cannot say whether they have in the others or not.

6791. What is the work that the boys have to do chiefly in Scotland?—Drawing, or what they call hurrying in England.

6792. What do you call the waggons in Scotland?—We call them hutches.

6793. Is that hard work which the boys have to do?—Yes, very hard work.

6794. What is the weight of coal carried in one of the hutches?—Five and 6 cwt.; 7 cwt., and so on; even 8 cwt.

6795. How far have the boys to draw those hutches?—It varies; in the older mines a very great distance indeed.

6796. They draw them along tramways, I suppose?—Yes, very long roads.

6797. Is it boys by themselves that do it, or boys and men?—Boys by themselves.

6798. And that you say is hard work?—Yes, very hard work.

6799. Have you seen the boys knocked up and exhausted by it?—I have been exhausted by it myself when I worked as a boy.

6800. Is there no difference between the system as it is now and the system as it was when you were a boy?—Very little; there is a slight difference in the better regulated mines now. I may state that when I was a boy we drew the coal entirely without rails. We had what we called ropes, made of leather, which were put upon our shoulders, and one boy went in front pulling, and the other pushed behind. Another form was a belt round the middle, and a chain following it; we had no rails in those days for the waggons to run on. Some of the hutches were without wheels, being made like sledges, and where that was the case it was very hard work to draw them. Now, generally, in all the mines that I know, they have rails carried into the working face, so that the work is not so severe in that respect, although the weight of the coal which is now drawn by the boys is much greater than it used to be.

6801. Have you known boys seriously injured of late years by this sort of work?—No, I do not know that I have; but I may say this, that you may know the boy who belongs to a mine perfectly well by his being twisted and stunted in growth and in his joints.

6802. The work has a permanent ill-effect upon the growth and constitution of the boys you think?—Yes.

6803. How many hours do they work?—In some mines they work much longer than in others. Where the boys are entirely under the control of their fathers (which is the case in many of the mines in Scotland), they work the boys generally longer than where they are under the control of the employer. If the boys work with their father, the father can take them out when he likes, and take them down when he likes. I reported a case to the inspector, Mr. Moore, so late as last Friday, 11th of May, where I found that a father had taken his boys three days consecutively into the mine, and the boys had got no rest. They were sent home to get a little food, and then they went back into the mine again. There were three boys belonging to one person that were for three days in the mine, just coming home for an hour or so.

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6804. They came home at night, I suppose?—No, they stayed all night in the pit.

6805. What ages were these boys?—It was reported to me that one of them was under 10 years of age. I wrote to the inspector respecting it, on that ground. Of course he has nothing to do with the hours that the father chooses to work.

6806. Did the inspector come?—I am not aware that he has gone there yet.

6807. How long ago was that?—Last Friday.

6808. You conceive that the inspector has no right to interfere as to the number of hours?—He has no right to interfere as to the number of hours.

6809. You do not say what is the average number of hours, but you say that the boys employed by their parents are made to work longer than those employed by the masters?—Yes.

6810. Was this boy to whom you have just referred employed in drawing the hutches?—No, in coal working, at a face with his father.

6811. Mr. *Woods.*] Getting coal you mean?—Yes.

6812. The father worked night and day getting coal, did he?—Yes; such is my information.

6813. *Chairman.*] Upon an average how many hours do the boys work when they work with their parents?—On an average from 11 to 12 hours a day.

6814. And when employed by their masters how long do they work?—They work, on an average, about 10 hours then.

6815. Have you ever heard of the masters interfering to prevent the parents working their boys too long?—Never.

6816. When the boys work for the masters do they do the same sort of work as when they work for their parents?—Yes, they do the same sort of work; but for the most part the boys are employed by the workmen, and not by the employers.

6817. Do the boys employed by the masters do drawing work?—Yes, numbers of them do.

6818. Then they are assigned, I suppose, to other workmen, or how are they disposed of?—They do the drawing altogether; they go to the workmen and take the coal of so many workmen.

6819. That is to say, the master divides the boys among the workmen?—Yes.

6820. How long do the men work?—In different localities they have different hours. Recently the men over Lanarkshire, generally, have adopted about nine hours' labour a day, but in other localities they work much longer; sometimes 12, 13, or 14 hours.

6821. Where the men work nine hours a day how long do the boys work?—About the same length of time; an hour later, perhaps.

6822. Is the system of double shifts at all adopted amongst you?—No, not in Scotland.

6823. As a rule, then, the boys work as long

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as the men?—As a rule the boys work as long as the men; sometimes longer.

6824. They stay in the mine after the men come out?—After the men come out the boys stay in the mine to draw the coal.

6825. What is your suggestion as to the employment of boys?—That they should work only eight hours a day.

6826. Up to what age?—Up to 14.

6827. Have you any suggestion to make as to the age at which they should be admitted at all?—I think that they should not be admitted before 12 years of age, and in saying that I am saying what I find to be the opinion of the intelligent workmen.

6828. Between 12 and 14 years of age would you make any provision for their schooling, or would you leave it to them and their parents?—I would make provision for their schooling. I would make it compulsory.

6829. You would have compulsory education between the ages of 12 and 14?—Yes.

6830. How would you enforce that compulsory education?—In Scotland we have to all the large works, indeed to almost every work, schools attached, either local schools or work schools, and the thing could very easily be done by its being made compulsory on the boys to go to the school in the afternoon of the day.

6831. You would subject the parents to a fine, would you, if the boys did not go to a school?—Yes.

6832. How many hours would you make a boy attend school between 12 and 14?—Two hours and a half a day, at least.

6833. There is no want of schools, I understand you to say?—There is no want of schools.

6834. Have you anything to say about women?—There are one or two counties where females are employed.

6835. What counties are those?—Clackmannan and Fyfe; and they have been employed in some portions of Lanarkshire within the last few years.

6836. Then the employment of women is rather gaining ground in Scotland, is it?—It is gaining ground within the last two or three years.

6837. To what do you attribute that; is it to the failure of the cotton in America?—No; I attribute it to the fact of their being got to do the work cheaper than the men.

6838. You think that the masters called in the women to prevent a rise in the wages of the men; is that what you mean?—I do not say to prevent a rise of wages; but they use them because they get them cheaper; that is my own impression.

6839. What is your feeling with regard to the employment of women?—I think that it is not right; it is unbecoming work for females, and ought to be prohibited.

6840. You think that it is degrading to the sex?—Yes.

6841. And you think also that it keeps down the wages of the men?—I have no feeling on that point whatever; not the slightest.

6842. But you think that it does keep down the wages of the men?—Yes, I think it does keep down the wages of the workmen, at least it brings more labour into the market; but upon the point of wages I have no feeling whatever. I may mention, in reference to that, a very sad accident which occurred just the other day; a female was engaged at one of our sinking shafts, and she tumbled right into the pit, and was killed on the spot.

6843. That might have happened to a man as well as to a woman, I suppose?—Yes, it might have happened to a man, certainly.

6844. It is not an accident that happened from the employment of women?—No, not because it was a woman.

6845. Was it that the pit was not properly fenced?—The flooring on the pit top was loose, and it moved with her weight upon the one end of it, and she fell backwards into the shaft.

6846. Sir *Philip Egerton.*] What employment are these women put to principally?—They screen the coal, and carry it to the waggons on the pit head; they fill the waggons, and trim them.

6847. How many hours do the women work?—Ten or eleven.

6848. And what wages do they get?—One shilling and sixpence or 1*s.* a day is about the average, I think.

6849. Is that laborious work?—It is laborious work.

6850. Very dirty work?—Very dirty work; they are all covered with soot.

6851. How are they dressed?—They are dressed like ordinary females; they do not dress like the Wigan ladies.

6852. With regard to this accident which you have alluded to, was it at one of the ordinary shafts that it happened, or was it a shaft in process of formation?—It was a shaft in process of formation; it was sinking.

6853. As I understand you the shaft was covered over by loose planks?—Not the shaft, but the striking board, as we call it; that is to say, the place where they take off the material; the boards were loose and she got upon the end of it and fell back into the pit.

6854. That was rather incautiousness on her part than the fault of the mode in which the pit was being sunk, was it not?—It was the fault of the wood being allowed to be loose, instead of its being fixed.

6855. About these boys that are employed by the masters, what wages do they get?—One shilling and six pence, 1*s.* 3*d.*, and 2*s.* a day, and so on.

6856. According to their capabilities?—According to the kind of work. The door-boys get 1*s.* a day.

6857. You have not alluded to them before; I thought you said that the boys were employed drawing the waggons?—There are door-boys as well.

6858. It is not hard work for them to mind doors, is it?—No.

6859. The small boys are put to that work, I suppose?—Yes.

6860. Those boys are paid by the masters?—Yes.

6861. Are any of those boys who are employed in drawing the waggons employed by the masters?—Yes, some of them.

6862. Those boys who work with their fathers are paid by their fathers?—Yes.

6863. In the case of the boys employed by the masters, the workmen get the coal, and the boys draw the coal, I suppose?—Yes.

6864. How is that arranged in the wages?—The employer pays the boys himself, and, as a matter of course, there is a corresponding deduction

tion in the rate of wages from the place where they are drawn by those boys.

6865. General *Dunne.*] You say that when the woman was killed, the boards were not properly fixed; that was the cause of the accident, was it not?—That was the cause of the accident.

6866. Is there any punishment for the master where any boards of that kind are not properly fixed, could not the master be summoned?—I think there is not at common law any procedure against the master to that effect.

6867. The boards were not nailed down in that case?—They were not nailed down.

6868. They could have been?—They could have been.

6869. And they ought to have been?—Yes, and they ought to have been.

6870. Mr. *Woods.*] With reference to this collier, who was working night and day, was it anything special or exceptional that he was doing?—No, nothing that I learned.

6871. Did not you say that he worked three nights and three days?—Yes.

6872. How could a collier be working three nights and three days at his ordinary trade?—I cannot tell how he could work; I know that I was able always to exhaust myself in the course of six or seven hours; but I have known men in mines that I worked in, in comparison with whom I might say that I could have got as much coal or ironstone in seven hours as these men got in the whole 24 hours, and more. They did not work, indeed, all that time, but they lay down and slept in the mine, and just commenced to work again whenever they got their sleep over.

6873. I am quite familiar with the necessity that there is in reference to the pumps and pit work of collieries, when there is a great breakdown, that some of the pitmen should stay for very long turns, as soldiers do in action, to see it set right before they leave. But that does not include boys, and that is not getting coal; and this collier was employed, you say, three nights and three days in getting coal, and only sent his boy home to get refreshment occasionally. Now, is it a well authenticated fact that that did occur at all?—It is a well-authenticated fact; I can give you the name if you wish it.

6874. You said, I think, that you did not know it from your own knowledge?—I have the testimony of three persons to it.

6875. Where is the place at which it occurred?—At the Shotts Iron Company's works; the name of the workman was Lacklan Shelley. I wrote to the inspector, having satisfied myself as to the correctness of that information by making the inquiries that I generally do. One of the duties that the workmen have assigned to me is to make inquiries in flagrant cases of this kind; and in this case I wrote to the inspector, in terms of the information, after I had made inquiries.

6876. I suppose that that was not an ordinary occurrence, but a very exceptional one?—The same person, I have been informed, is in the habit of doing it frequently. I should mention that he is a piece-worker, and whatever coal he gets, the more the quantity the more the wages he gets; being a piece-worker therefore, the longer he works the more work he does, and the better it is for him.

6877. It is a peculiarity that attaches itself to this man or only to a very few men, is it not?—It happens with a number of men.

6878. You said, did you not, that in Scotland there were generally schools attached to large works?—Yes.

6879. Who provides those schools?—Ostensibly the employer provides the schools, but the workmen pay for them, and more than pay for them.

6880. Is there a fixed charge for children going to school?—Yes, a fixed charge.

6881. And it is more than remunerative, you say?—We have reason to believe that it is more than remunerative.

6882. Do you know what the fixed charge is?—Twopence a week.

6883. Are you aware that the National Schools in England generally charge 2*d.* per week for the children who attend them?—I am not aware of the practice in England, but I had better explain what I mean by that answer respecting the schools. In Scotland, in almost every work, the workmen are compelled to pay for school fees, and in almost every work they are compelled to pay also for doctors.

6884. *Chairman.*] When you say in almost every work, do you mean in almost all mining works?—Yes, in all mining works, the expression relates to them. A very great grievance among the workmen is that, while the schools are supported by them the employers appoint the teachers. They appoint the doctors also, and they compel the workmen to pay for teachers of their appointment and doctors of their appointment, and workmen have no power in the matter. The workmen do not object, in Scotland, to school fees, and they do not object to paying doctors' fees, but a strong spirit of discontent exists among them in consequence of their being compelled to pay for that which they have no choice in, and which they get no account of. They have very good reason to believe that some of the owners make a large profit out of the transaction.

6885. Mr. *Foster.*] Would you desire, then, that the building of schools and the maintenance of schools (presuming the masters to wash their hands of it all) should be done by the working men themselves, and that the masters thereby should be relieved from all responsibility in the matter; would you desire that it should rest with the men to erect schools, and carry them on, and that the masters should be relieved from all responsibility?—No, I should not say that they should be relieved, but I think the workmen should have a choice, seeing that they contribute and pay for the teacher.

6886. You think that the men should appoint the schoolmasters?—Yes, the men should appoint the schoolmasters; they should have a voice, I think, in the appointment of the schoolmasters, at least.

6887. The employer is to find the land, and build the school; is that what you propose?—No, I should say that the master has a perfect right to levy upon his employés, to the extent of paying for the school; that is to say, for the building of the school, which indeed they do now.

6888. Will you explain in what way they do that?—The large firms of Merry & Cunningham, of Carnbroe, Stevenson, Woodhall, and a number of other places, in addition to school fees, charge every workman for the building and the maintenance of the school, a penny per pound on his wages. I have estimated the cost of building one of the schools for which they have taken that penny

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penny per pound for over eight years; and I find that they could have built the school 12 times over, with the money that the men are bound to pay for that school now.

6889. Is that instance that you have cited an exceptional instance, or is that a general thing?—It is what is done by that large firm, Merry & Cunningham.

6890. Have you ever heard of that plan being adopted by any other large firm?—The Messrs. Baird adopted it also in another form by additional fees.

6891. Would you prefer that there should be no schools whatever erected on such a plan as that, rather than have such a deduction made?—I certainly would not say that I would have no schools at all. I would take schools under any disadvantage, in preference to having no schools at all; but I think, and the men think, that it is unfair for the masters under the name of education to make a profit and traffic in it.

6892. When you state that there is a profit and a traffic made in education, have you anything reliable to show to the Committee to support what you have stated?—We may take the workmen employed at the works of Messrs. Merry & Cunningham, at Inkerman, where there are 800 or 900 men employed. Allowing their wages to be only a pound each per week (though it is more) on any average, that is 900 pence every week for the building and the maintenance of that school. The original cost of the school, I am satisfied, at the furthest mark, would not be 400 *l.*, and you can find at once what sum in eight years that 900 pence will afford.

6893. For what number of scholars is this school adapted?—About 300; 200 to 300 children.

6894. It did not cost 400 *l.*, I understand you to say?—Not 400 *l.* of the company's money, because they had a Government grant for the building of it; all their schools are under a Government grant; nearly all the schools at mines have been aided by Government grants.

6895. Exclusive of the Government grant, you think that it did not cost the company more than 400 *l.*?—I am satisfied it did not.

6896. Sir *Philip Egerton.*] You use the term "maintenance;" what do you mean by that?—The maintenance of the building; there is 2 *d.* per week for each workman to pay, whether he has children or not (in addition to that penny), for the maintenance of the teachers.

6897. Mr. *Foster.*] Is the penny a pound deducted exclusively for the building and maintenance of the school?—So it is stated to the workmen.

6898. Does that include medical attendance?—No, medical attendance is separate; there is a separate payment for that altogether. There is 2 *d.* per week for medical attendance, in addition to that.

6899. What do you say is deducted for the carrying on of the school?—Twopence for each workman is taken for the carrying on of the school, that is, for supplying the school with teachers.

6900. Is that deducted for each boy?—For each workman who is engaged; and if the boy is what they call a half boy, that is to say, on what they call half rates, he pays a penny, and you pay whether you have children or not.

6901. General *Dunne.*] How are they compelled to do it; is it by contract?—Yes, by contract. The workmen do not object to the paying for the school fees, but what they do object to is paying for teachers not of their own appointment. Besides that, a very large number of the miners in Scotland are Roman Catholics, and they are compelled to pay for a system of education that they do not believe to be right education; they have to pay for that whether they will or not.

6902. Is religious instruction forced on them?—There is a Protestant teacher, and the Protestant forms of teaching are carried on in the school; and if they do not send their children there they pay all the same.

6903. Is it purely secular education, or is it religion mixed up with it?—Religion is mixed up with it; none of our schools are purely secular; the Bible is read, and other books.

6904. Do not you think it fair that where the men have to support the school themselves there should be a balance sheet submitted to them?—That is what they wish to have, and a share in the management. I never met one man who objected to the teachers and the teaching on principle; but what they object to is the want of any power in the management, or any knowledge given to them as to how the money so taken from them is applied.

6905. Mr. *Foster.*] You say, I think, that this is an exceptional case; would you desire legislation to be adopted for the sake of one solitary work?—I did not state that that was an exceptional case; it is so over Scotland generally.

6906. I understand you to say that that state of thing was confined to the work of which you have been recently speaking?—I gave that work as an instance only.

6907. Mr. *Clive.*] When you say that a great portion of the miners are Catholics, are they Irishmen or Scotchmen?—They are Irishmen.

6908. *Chairman.*] I have worked out your calculation of one penny in the pound for 900 workmen during eight years, and I make it out to be 1,560 *l.*; does that agree with your calculation?—Yes, that agrees with my calculation; and that school was built partly with a Government grant.

6909. There was the assistance of a Government grant, and you estimate the cost of the school at 400 *l.*?—Yes.

6910. You say that every workman pays 2 *d.* a week whether he sends his children to the school or not?—Yes.

6911. He must have children, I suppose, or he will not be compelled to pay?—Whether he has them or not he pays.

6912. How many children do they assign to each workman; supposing, for instance, that a workman has no children at all, what do they make him pay for the schooling?—Twopence a week.

6913. He is assumed then to have at least one child?—He should have one according to them.

6914. You mean that a workman without any children at all is made to pay 2 *d.* a week for the schooling?—Yes unmarried men have to pay, or married men if they have no family.

6915. If the workman has more children than one, he pays for the number he has, I presume?—Then he pays so much more for their attendance.

6916. Sir *Philip Egerton.*] So much per head for the children who attend, you mean?—Yes.

In

In some works it is 1 *d.* a head per child, in addition to the 2 *d.* One child, however, is allowed to go for the 2 *d.*

6917. *Chairman.*] And after that every additional child is charged either 1 *d.* or 2 *d.*?—Yes.

6918. Is he more commonly charged 1 *d.*, or 2 *d.*?—A penny is the more common charge. While I have given that instance there are other instances of the same firm in reference to other schools. I will, in the course of a few days, hand in a table of the schools, mentioning the length of time for which they have been built, if the Committee desire it.

6919. With reference to the boy who you said was kept three days in the mine, is it the custom in the mines there to allow the workmen to spend a night in the mines?—They can do so if they like.

6920. There is no rule of the mines against it?—There is no rule of the mines against it at all.

6921. What do they do with their lights then; do they put them out?—No, they continue with their lights.

6922. Supposing a workman takes six hours' rest in the pit, what does he do with his lights?—He will put them out, and have a match near him very likely; I do not know.

6923. That involves the necessity of re-lighting his lamp, does it not?—Yes.

6924. And therefore it involves a violation of the rules of the mine, does it not?—There are no rules about that; these mines are not liable to explosive gas.

6925. Not any of them?—Not in that part.

6926. In the district of Scotland generally, are they?—Yes, many of them are very explosive.

6927. Mr. *Clive.*] Are they coal mines with the blackband ironstone?—Yes, some of them are.

6928. *Chairman.*] As to the ventilation of the mines generally, have you attended to that subject?—Yes.

6929. What have you to say to the Committee upon the ventilation?—In the matter of ventilation there has been a very great improvement within the last 12 or 15 years, and I believe that that improvement has been greatly owing to the legislative enactments of 1850, 1855, and 1860, and still there is room for improvement, and a great improvement yet; but I wish distinctly to be understood to state that there has been in the management of the mines in Scotland generally a very marked improvement in the last quarter of a century. Ventilation, as a whole, is being more attended to now than it was even so recently as 1858 and 1859.

6930. But you still think that it is defective in some cases?—Yes, it is defective.

6931. What is the nature of the defects?—Want of carrying in the air; want of a sufficient outlay in carrying in the ventilation.

6932. Is the ventilation done by a double shaft and furnace?—Yes, it is done by a double shaft and furnace.

6933. In every case is there a double shaft?—In every case nearly.

6934. Do you know of any mines in Scotland where there are not double shafts?—I know a number of such.

6935. Those are cases where they have not complied with the Act of 1862?—Yes.

6936. Mr. *Clive.*] Are those under Mr. Alexander, or under the other inspector?—Under both.

6937. *Chairman.*] In these cases they divide the one shaft by brattices, I suppose?—Yes.

6938. Is the defect in the air-ways, or in the want of furnace usually?—Both in the air-ways and in the want of furnace power. I may state, that in many of the large districts there is a total absence of fire-damp, and the mine is infested with carbonic acid gas, or black damp, as we call it.

6939. Is the ventilation attended to where the miners are liable to suffer from black damp?—Not so much in those cases.

6940. Does the health of the miners suffer much in consequence?—The health of the miners suffers a great deal in consequence.

6941. Have you noticed where that is particularly the case?—Yes; if you take the miners of the county of Clackmannan, where there is no fire-damp whatever, and the miners of Mid-Lothian, where there is no fire-damp whatever, you can know them in a crowd from the miners who work in mines which are ventilated. Their appearance is unhealthy and sickly, and there are not many old men among them.

6942. At what age do they give up work?—They are all dead by 45 or 50, nearly.

6943. Has there been any improvement in the ventilation of those black damp mines?—A little, not much.

6944. The improvement has chiefly been in the mines which are liable to explosion, as I understand you?—Yes.

6945. Have there been any accidents of late from explosion?—A great number.

6946. How recently?—They happen almost daily; I mean slight explosions, not severe ones.

6947. What was the last considerable accident to which your attention was directed?—We have never had any great explosion in Scotland, but at Hurlet and Common Head, Airdrie; but in the district of the large coalfield of Whishaw, a number of very serious explosions have occurred, embracing two and three persons at a time, within the last two or three years. Within these last few months there have been three or four of that character.

6948. Do you conceive that those accidents generally have arisen from the carelessness of the workmen, or from want of ventilation?—From want of ventilation. If proper ventilation was carried on in Scotland there could be no accident at all.

6949. You believe, then, that if the ventilation was properly attended to, the workmen might work with naked lights?—Yes; indeed it is the practice generally in Scotland to work with naked lamps; there are only a very few exceptions where the safety lamp is used; and I can mention one of the inspector's own opinions on that subject. Mr. Moore, before he became inspector, wrote a work on the subject, and the last words of his work are to this effect: if these rules were attended to (that is to say, the foregoing rules laid down by him) an explosion in Scotland would be almost impossible. That is his deliberate opinion.

6950. What work is that?—His work on Ventilation of Mines, written by him previous to his appointment as inspector of mines.

6951. It is no official document, but a private book?—Yes, a private book. In the last words of the book which I have referred to he gives his opinion very strongly, that if these rules were

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attended to, explosions would be all but impossible.

6952. And these rules do not include the use of a safety lamp?—They do not include the use of a safety lamp, certainly not.

6953. Do the rules of the mines generally allow the use of a naked light?—Yes.

6954. But are there some mines where the rules do not allow it?—Yes, one or two exceptions only.

6955. Do the workmen earn less for a day's work where they are obliged to use the safety lamp?—No, I think not; where they have the safety lamp, for the most part it is an easier class of working.

6956. Is the fact of their being obliged to use a safety lamp considered in their wages at all?—Yes; in one case only that I know of there is so much allowed for the using of the safety lamp.

6957. Do you mean for the expense of the lamp itself?—No, but the men are allowed a little more if they work with the safety lamp.

6958. What are your suggestions then upon the subject of ventilation?—That there should be a larger number of inspectors, who should have not the direction of the mine, but the power of suggesting. I think that the inspection should be carried on with a dictum such as that laid down by Mr. Moore.

6959. That there should be more efficient inspection, you mean?—Yes, more efficient inspection and ventilation.

6960. You have spoken of the air-ways being deficient; what is the deficiency of the air-ways; is it that they are not wide enough, or that they are allowed to fill up?—The ventilation is not carried properly in by bratticing.

6961. The system of bratticing, in fact, is not sufficient?—No.

6962. How far off from the current of air are men liable to have to work?—If I speak at all on that point, it will only be by hearsay. I have worked, myself, 25, or 50, or 60 yards off the air-way.

6963. How long ago?—Fourteen years ago; and now, although there is an improvement, there are still men who work a long way from the air current.

6964. At least according to what you hear?—Yes.

6965. What do you call a long way?—Forty or 50 yards.

6966. Are you speaking of explosive mines, or of black damp mines?—Both of explosive mines and black damp mines.

6967. Mr. *Clive.*] Are there not cases of blowers in Scotch mines?—There are one or two places where we have jets and blowers, but that is exceptional.

6968. Those cases could not be met by ventilation, could they?—I think so. I never heard of a single case of a jet or blower in a Scotch mine that could not. The opinion of Mr. Moore, and which I coincide with, is, that 8,000 feet of pure air per minute is capable of ventilating any mine in Scotland. Now, if we look at the other mines in England, and remember that many of them have 192,000 feet of pure air, it is clearly shown from that, that if 8,000 feet is sufficient it can be got, and all that is wanted is proper appliances to get it.

6969. You say that the inspector should suggest?—Yes.

6970. Should he have power to order, or only to suggest?—If his order, or his suggestion was disobeyed, or not attended to, I think that the statute should be made less cumbersome, and instead of being referred to a mining engineer, it should be referred to the sheriff of the county or of the district.

6971. You would not give the inspector power to order anything to be done?—I would give the inspector power to advise it, and if the advice were not followed the inspector should submit it then to the sheriff of the district for the time being.

6972. And he should have the power to order it, should he?—Yes; if he found, on proof, that it was necessary. I may mention an instance of what I consider a gross want of inspection: on Tuesday last, 8th of May, two young men were working upon an inclined plane, unhooking two tubs, and there were two other tubs which became unfastened (this mine, I should say, has been going on for some years); the four tubs accumulated their weight upon one of the young men, and crushed him, so that he died on Friday, 11th of May. This has been going on for years, and there is not a man-escape, that is to say, a place of refuge in the whole plane; had there been good and proper inspection, the inspector of that district, Mr. Moore, would have seen to proper escape places being there. The boy died, as I have said, on Friday the 11th, and up to the present date, as far as my information goes, the place has not been visited by the inspector, and I gave him notice of it on Friday morning.

6973. Do you know how many collieries he has to attend to?—There are 1,140 pits in Scotland under the Inspection Act.

6974. And but two inspectors, are there not?—Yes, but two inspectors; it would take them two years to pay a visit to all the pits. The inspector in this case may not be to blame in the matter, because he has not time to do the work.

6975. Mr. *Foster.*] You stated that the inspector should have power to suggest, and then if his suggestion were not attended to, to represent the matter to a third party?—Yes.

6976. But are you not aware that that is already met by the 17th section of the Act, according to which the individual to whom appeal is to be made is one of Her Majesty's Secretaries of State?—Yes, but again, Her Majesty's Secretary of State is cumbered with that appeal; he has to remit it to mining engineers, and then the mining engineers take 21 days before they give their opinion, and what we want is a speedy and efficient correction, if necessary.

6977. Do you mean by penalties, or how?—Yes, by penalties.

6978. Are you aware that that is also provided for by the Act, and that under the present Act the owner is liable to a penalty of a pound a day for every day that he neglects to take proper precautions?—I am aware of that; but that is after the thing has been ordered by a mining engineer, and after it has gone through the cumbrous policy which has been laid down by that statute.

6979. Mr. *Clive.*] Have you ever known the penalty inflicted?—No, not if fought or contended against; besides, while speaking of that statute as

as a statute, I may say that it does not and cannot tell whether it applies to Scotland or not.

6980. *Chairman.*] Who has raised the doubt?—I will explain the matter: shortly after the passing of the statute, the fiscal of Airdrie, Mr. Macdonald, took up a case against Young and Bredisholm. He carried the case before the sheriff, and then after it was carried before the sheriff it was carried to the Court of Session, the employers' association holding that the fiscal had no power to sue, and that it was purely a civil question. You will find that reported in the Scottish Jurist—Macdonald against Young.

6981. That was done on the ground that the fiscal was only able to interfere in criminal matters?—Yes, and it was sustained. Knowing that this inquiry was to take place, at least that it was got last year, I, as a common informer, instituted an action against a coalmaster named James Snowdown, Tillicoulty Colliery, on behalf of the workmen, in order to see what the law was, that is to say, to get at it, and if it was worth anything to know what it was worth previous to the inquiry before this Select Committee; I carried the complaint before the sheriff substitute, and, latterly, before the sheriff principal of the county of Clackmannan, and I was held as having no right to sue as a common informer. A workman named John Mitchell, who had been working in a part of the mine which was notoriously filled with black damp or carbonic acid gas, and who had suffered therefrom, instituted an action against the same employer, Snowdown, and it was carried before the sheriff substitute, and then to the sheriff principal, and it is now in the Court of Session. The sheriff substitute and the sheriff principal held that the workman had no right to sue. Since that, the men still determined to see what the law was; the question was raised in a mine where four persons were burned, and one of them very severely burned, James Lapsley. The interlocutor of the case, of which I hold here a copy, was pronounced by Sheriff Allison. The workman went to the fiscal and asked him to give him his concurrence to sue; and this copy of the interlocutor, produced or written by Sheriff Allison, states, that the workman and the fiscal conjoined had no right to sue. The workman tried first the fiscal, and the fiscal is held not to have power in the case of Macdonald *versus* Young, in the Court of Session. The informer himself is found not to have power. The workman injured is found not to have power; and the workmen injured conjoined with the fiscal is held by Sheriff Allison not to have power. So that the statute, as far as Scotland goes, is without any power. One or two penalties, indeed, have been paid by the employers, but that is only where they had not been fought or contended against; had they been carried to the court, I believe, from my own experience, that they would have had no power to sue. I will hand in, if it is desired, copies of the interlocutors. I have only now the one of Lapsley against Neilson, of Summerlee Iron Company; but I will find the other two. I think that in the framing of a statute again, there should be schedules put to the statute; and that in so far as Scotland is concerned, it should be clearly pointed out who is the pursuer. We want the power in the hands of the common informers.

6982. General *Dunne.*] The Act itself is clear enough, is it not, as far as words go. As you read the Act, does it give the power?—It seems to me to give the power.

6983. Is it not the peculiarities of Scottish modes of procedure rather than any defect of the statute, that make the difficulty in regard to inflicting the penalty?—Yes; it is the peculiarities of our Scotch modes of procedure.

6984. Are you aware whether penalties are inflicted in England under that Act?—Yes, I understand so.

6985. *Chairman.*] In addition to accidents from defective ventilation, do accidents frequently happen from want of proper refuges in mines?—Yes.

6986. Then you have to point that out as one of the instances of non-compliance with the law in Scotland?—Yes.

6987. Is that common?—Yes, it is common.

6988. Do you know from your own knowledge that it is common?—I know it from knowledge of parties being killed and injured, and from people coming to me and reporting it; not from my own personal observation.

6989. But accidents have frequently occurred, I understand you to say, from men being crushed for want of these refuges?—Very many of them.

6990. Have you called the attention of the inspectors to that?—Frequently.

6991. Has that produced any improvement?—I cannot say it has.

6992. What is the nature of the enquiry that takes place when anybody is killed by accident in a mine in Scotland?—The place is first visited by the police of the district, who carry such information as they are able to collect, to the fiscal; the fiscal then sends a youth from his office, and he makes his examination.

6993. Does he always send a youth?—Generally.

6994. A clerk, you mean, from his office?—Yes, generally. That clerk makes his report, and the inspector makes a report, which he sends to the fiscal.

6995. Who gives the inspector notice of the accident?—The mine-owner is bound to give the inspector notice under the statute, and I believe that generally, though not always, that is carried out. Then the fiscal makes a report to the Lord Advocate.

6996. Does the fiscal usually come to see the place himself?—No, not usually, but only sometimes. More frequently it is done by the clerk from his office; then the fiscal remits his report to the Lord Advocate of Scotland, and if there are any proceedings to be taken it is there that the decision rests whether proceedings are to be taken or not.

6997. What has been the result usually in the case of these accidents; have any proceedings been taken?—In a number of instances and under particular fiscals.

6998. By proceedings, you mean criminal proceedings, do you not?—Yes, criminal proceedings.

6999. You have known, I understood you to say, criminal proceedings to be taken in various instances?—Yes, under particular fiscals.

7000. That is to say, some fiscals are more zealous in bringing a case forward than others?—Yes, some are more zealous than others. I do not want to throw an aspersion on the fiscals as a body; they may be all equally as zealous, but I can

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I can only say that the result is this, that in the case of certain fiscals there are more instances of prosecutions where any neglect has occurred.

7001. And what has been the common result of these prosecutions?—A number have been convicted, and a number have got off.

7002. Have the workmen been satisfied with the result of the prosecutions generally?—They have been satisfied with the result of the prosecutions, but they are not satisfied with the fewness of them.

7003. They are satisfied, you think, with the way in which the cases that are tried are disposed of, but they think that other cases might be tried?—They are not satisfied with the manner of conducting the cases at all. There is a strong opinion among the workmen that there should be an open investigation into every accident by the sheriff of the district, or a coroner's inquest.

7004. But they are satisfied, are they not, with the way in which the cases are disposed of by the court, when they do come before the court; there is no complaint of the decisions of the court, is there?—No, I think not.

7005. Mr. *Clive.*] Do you mean to say that the procurator fiscal was held not to be able to sue?—He is held not to be able to sue the case criminally.

7006. Who held that?—Sheriff Allison, and the Court of Session held that; you will find it in the Scotch Jurist, Macdonald *v.* Young.

7007. *Chairman.*] Do many accidents happen from falls of roof?—Yes, a good many accidents happen from falls of roof.

7008. Are the directions of the Act as to the supply of timber properly attended to?—The supply of timber is generally pretty well attended to; there are complaints that reach me, but not extensive complaints.

7009. Is it the practice to make the men pay for their timber?—No.

7010. Do you mean that that is not done at all?—No, it is not done at all; the timber is supplied. It has happened, however, frequently that efforts have been made to make the men take their own timber into the mine; but those efforts have been met in late years by severe and protracted strikes, as at Inkerman, belonging to Merry & Cunningham; men will not cut their own timber and carry it into the mine.

7011. The result of that conflict between the masters and the men has been that the masters have given way?—In a number of instances; in others they have not.

7012. They take the timber to the working places of the miners for them, you mean?—Into the mine to a certain stage.

7013. To a convenient distance?—To the pit bottom.

7014. And then the miner has to take it from the pit bottom to the working face?—Yes, in many cases.

7015. Are these large mines of which you are speaking?—The old mines are very large.

7016. How far would the greatest distance be from the foot of the shaft?—Half a mile.

7017. Is it more than half a mile in any of these mines?—Yes, more than half a mile.

7018. Is it as much as a mile in any of the mines?—I think not. The strong opinion on the part of the workman is that the wood should be cut and carried to their working places for them.

7019. Who cuts the wood?—In most instances the employer cuts the wood, but the workmen do it themselves in some instances; in the smaller mines, sometimes they have to do it themselves.

7020. Comparing the smaller mines and the larger mines, in which class of mines are the provisions of the Act best attended to?—In the larger mines.

7021. Are the smaller mines in the hands of companies, or in the hands of individual proprietors?—In the hands of individual proprietors or contractors. Under these contractors, as we call them (they call them charter-masters or butties in England, I think), there is a very great want of care. I am convinced that if an inquiry was made into the works managed by these contractors, the loss of life and injury to life would be found to be, to a very great extent, more in those cases than where the works are carried on by the larger companies themselves.

7022. Is that system of working the mines by contract common in Scotland?—Under the large firm of Messrs. Bairds it is common, and with a number more also.

7023. Do you mean that the owners of the mine contract for the working of the whole mine, or that they contract with sets of workmen for the working of particular parts?—They contract for the working of the whole mine. The contractor raises the iron or the coal at so much per ton; he receives the engine, and the gearing, and the working, and so on, and he produces the coal or iron at so much per ton.

7024. Is there also a system of partial contract adopted in Scotland, that is to say, employing contractors to do parts of the work; what we call the butties in England?—Yes, there is a good deal of that too.

7025. If a man contracts for the whole mine, you do not call him a butty, do you?—A contractor.

7026. You have not the term butty at all in Scotland, have you?—No, we have the practice, however.

7027. As to the machinery and the engines, are those properly attended to generally in Scotland?—They are properly attended to upon the whole; there might be an improvement in individual cases.

7028. Have you known of accidents from the breaking of chains?—Yes, and ropes.

7029. Have they been frequent?—Yes, they have been frequent, as the inspectors' reports would show.

7030. Have those happened more in the small mines than in the large mines?—As a rule, I think they do happen more in the small mines than in the large mines.

7031. Is that rule of the Act about a sufficient cover over-head being used when lowering or raising persons properly attended to?—Generally the cages are covered in Scotland (not always in sinking shafts, and so on), because in Scotland at common law, as we call it, if an employer does not sufficiently attend, even without the statute, to the interest of the workman, that is to say, care for him, our law affords us actions of relief, and we take them into courts, and we very frequently do that.

7032. Still there are instances in which the cages are not provided with a cover?—There are

are of course solitary instances, but now that is not the case generally.

7033. Have you known accidents occur from the fall of material in those cases?—Yes, you will find them recorded; and the workmen are of opinion that it should not be left optional to the inspector to order it, but that it should be absolute.

7034. You would suggest that alteration then in the ninth general rule, that there should be no qualification?—Yes, no qualification.

7035. Have you any alteration to suggest in the general rules?—Yes, in the first general rule.

7036. As that refers to the question of sufficient ventilation, of which you have already spoken, you need not go into that, perhaps?—I would suggest that in all pits where there are two seams being carried on, fences should be required. A large number of the accidents that happen in Scotland occur from the shafts, where they are carrying on two seams; and one being at some distance above the other, men fall down the shafts. There should be a rule making it a necessity to have these shafts securely fenced; I mean fenced at the working place of the seam as well as at the top, in order to prevent men falling in.

7037. You mean that the seam gives in to the shaft half way down, do you not?—Yes, half way down, or at other distances.

7038. And there is no sufficient protection in those cases?—There is no sufficient protection.

7039. But there is a rule as to that, is there not?—No; there is a rule requiring a fence for the top of the shaft, but there is no rule for the body of the shaft.

7040. Sir *Philip Egerton.*] You refer to the case of working in different levels where the levels come into the main shaft, do you not?—Yes, different seams of coal.

7041. *Chairman.*] And you have known accidents from the want of such fences, you say?—Many accidents; one occurred last week.

7042. But if there was a fence at the mouth of the seam, how could they put the coal on the cage?—They could have a moveable fence. The workman, or rather the lad (for it is with boys that the accidents occur mostly) comes with his tub to the shaft, and he tumbles in altogether. You will find a large number of instances of that in the inspector's report.

7043. And you would suggest a rule to prevent that, as I understand you?—Yes.

7044. Is not that provided for already in many special rules?—No.

7045. General *Dunne.*] Is there no punishment for having unguarded machinery, or want of fences in mines?—No, there is no punishment.

7046. *Chairman.*] Have you any further alteration to suggest in the general rules?—Yes; in reference to rule 2, I would suggest that it should include all accessible places, and that the ventilation should be carried into them all.

7047. You purpose that they should not be merely fenced off, but that the ventilation should be carried into them?—Yes.

7048. General *Dunne.*] You do not propose that any of them should be bricked up?—If the ventilation was carried into them, they would not require to be bricked up. We have annually had accidents that have occurred, as may be seen on reference to the inspector's report, from that same cause—the unfenced places, and the men having access to them.

7049. *Chairman.*] Then the second general rule, you say, has not been complied with?—No, it has not been complied with.

7050. You think it a defective rule, and suggest another rule in its stead?—I would suggest that the first rule should contain the words "all accessible places," and then the second rule would not be necessary at all.

7051. Sir *Philip Egerton.*] Have you any accidents from machinery in the district from overwinding or from a want of proper supervision of the engines?—Not many lately; we have White & Grant's safety cage extensively used, and overwinding accidents have not been so numerous of late.

7052. Is that safety cage provided with a disconnection hook?—Yes.

7053. Do you find any objection to the use of that safety cage?—No, we find no objection to the use of it among the workmen.

7054. Do you see any reason why it should not be adopted in all mines?—No, I think it should be adopted in all mines. The most improved safety cage, whatever that may be, should be submitted to the Home Office, or with a minister of mines with a council, I think, and at all times, whatever improvements may come before the public, I think, and the miners think also, that it should be in the power of the Council to order that those improvements should be adopted. There is nothing in the working of the mine to prevent it, and it would add much to the safety of the miner if adopted.

7055. Are any of your pits provided with safety catches to prevent the skip falling to the bottom?—I do not know of a single instance.

7056. You have conducting rods, I suppose?—Yes, all have conducting rods.

7057. Are the signal wires in good condition?—There is complaint in that respect, in some instances, but that is owing, I believe, to the want of proper inspection. If inspectors were sufficiently numerous to attend to that, they would point it out where necessary; generally they are adopted.

7058. The props are put up by the workman, I conclude?—By the workmen in Scotland.

7059. Do you find that the workmen are careless sometimes in putting up the props?—Yes, I do.

7060. How would you provide against accidents which are attributable to carelessness on the part of the workmen?—I would suggest, and the more intelligent of the workmen would suggest also, that the principle should be adopted which is adopted in the North of England, that is, that the roofs should be attended to by the employers. In Northumberland and Durham there are men appointed for the purpose of attending to the roofs, and the more intelligent of the men are of opinion that that should be done in Scotland.

7061. But I suppose that it is part of their contract to attend to the roofs in Scotland?—Yes, it is part of their contract to attend to the roofs.

7062. And if men were appointed for the purpose, that would require to be met by a corresponding reduction, would it not?—Yes, in the rate of pay for the miners.

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7063. You say that the defective ventilation is often in consequence of want of brattices; are the brattices put up by the workmen, or by the owners?—Generally the bratticing is put up by the owners, that is to say, by men specially appointed for the purpose; but sometimes the men, who contract to do it for themselves.

7064. Can you inform the Committee whether, in the case which you have alluded to, that bratticing ought to have been put up by the owner, or by the workmen?—By the owner.

7065. In the case of the workman finding the bratticing not sufficiently extended, to whom do they make representations?—To the overman.

7066. And are those representations attended to?—Sometimes they are, and sometimes they are not.

7067. Do you think that the men complain when there is cause for complaint, or are they rather reckless, and do they go on working rather than make representations to the owner?—A number of men are reckless, and many are ignorant of what may happen, and do not complain. On the other hand, where men of intelligence would like to complain they are afraid to do it, as complaints are met by a dismissal.

7068. They can easily ascertain the state of the workings by burning a candle in them, I suppose?—Yes; and the managers and overmen who went to the workings could see at once, if they had skill, that the mine was in an unhealthy state, and would require no representations to be made to them.

7069. Are there any men that visit the workings to see if they are safe for the miners?—Yes, firemen.

7070. Is it the fireman's duty to give information if he finds that they are not safe?—Yes; but frequently he only tells the men to go on waffing the gas out, and we have a large number of accidents occurring from that. The man goes in with his coat, and commences to strike the fire-damp about, and then an explosion follows.

7071. You think that a dangerous practice?—Yes; it is the fire-damp that I am speaking of now, not the carbonic acid; they cannot waff out the carbonic acid.

7072. My question had reference to carbonic acid gas?—They cannot waff that out.

7073. The presence of the inflammable gas is detected by the flame of the candle jumping?—Yes; but in many mines in Scotland candles will not burn at all; oil will burn where candles will not burn, and in a number of mines in Scotland now they use oil, because the ventilation is defective, and the oil burns; tallow will not melt, so as to burn, where there is a considerable presence of black damp.

7074. *Chairman.*] Can you tell us in what mine or in what district that is the case?—In Midlothian; I do not wish to mention any particular mine, unless the Committee desire it.

7075. Are you satisfied with the competency of the firemen to do their duty generally?—No; nor are the workmen satisfied.

7076. You think that sufficient pains are not taken to ascertain their qualification?—No, sufficient pains are not taken; and besides that generally they have lower wages than really good workmen get; I myself never would have become a fireman.

7077. It is not considered a promotion, you mean?—I would not be promoted to it from a workman.

7078. Who are the men that are commonly appointed firemen?—The man generally appointed fireman is some favourite of the manager, who is more willing to take easy work than to exercise skill in doing a hard day's work.

7079. It is an indifferent workman, who is a favourite of the overman, that is selected?—The appointment is made most frequently from that description of workmen; not for skill.

7080. Have you known firemen who knew nothing of the mine in which they were appointed to act?—Yes; numbers of instances are brought under my notice of men being appointed firemen who are utterly ignorant of the gas which they go and examine.

7081. Do you mean men who have never worked in the mine where they are put to act as firemen?—They have worked in the mine, but their experience as miners is not sufficiently great.

7082. You mean that they may have worked in the mine to get coal?—Yes; and not unfrequently (again, if the Committee would wish, I could mention names, but I do not desire it) men who have been at mining for only a few months, or a couple of years or so, are appointed to these situations, situations of trust that ought only to be in the hands of a most skilful person.

7083. When you were acting as manager in a mine, you were overman, not fireman, I suppose?—I was there as overman; we had carbonic acid gas, but no fire-damp.

7084. Where there is carbonic acid gas they have no fireman?—No.

7085. Is there anybody to go round the mine in those cases, to see if the ventilation is sufficient?—No, not where there is only black damp.

7086. It is left to the workmen?—It is generally left to the workmen.

7087. Have you anything to suggest as to the appointment of firemen?—I think it would be desirable that a Board, composed either of mining engineers or of skilled persons in the district, under the superintendence of the inspector as Chairman of the Board, should be constituted, and before any person was appointed to the place of fireman he should be subject to an examination, and have a certificate that he was competent to take charge of the work.

7088. At the beginning of your evidence you said, did you not, that you had an objection to make to the use of the truck system?—Yes, the truck system has thrown, as it were, a network over the entire system of works in Scotland.

7089. It is extensively prevalent, you say?—Yes, it is prevalent; it exists in the works of Merry & Cunningham, the Summerlee Iron Company, the Dundyven Iron Company, the Govan & Calder Iron Companies, the Monkland Iron and Steel Company, Coltness, and others.

7090. In what form does the truck system exist?—They have monthly pays in all these works with one exception; they adopt the system of giving their men cash every day, or three times a day, if they should require it.

7091. In advance, you mean?—An advance of cash. The firm of Merry & Cunningham have

have 11 stores; they have 11 licenses for strong drinks.

7092. Are these stores near the mines at the mouth of the pit?—They are close by the mines; the men go through the form of being paid ostensibly in cash. The office is built, in terms of the Statute, not contiguous to the store. Our interpretation of the Act in Scotland is that by law, if they do not rub each other, that is all that is necessary.

7093. What distance is the office?—Not a yard off, or perhaps two yards, or a dozen yards at the very most. The money is paid over to workman, or to some one on his behalf. If the workman, or the person on his behalf, takes the money away, and does not go to the store, there is no more money for him again till the end of the month, and that system fosters the habit of improvidence; I may state that there are several places where there is no such thing. In the county of Clackmannan there is not a store belonging to the employers; and in Mid and East Lothian there is not one. They pay them there fortnightly and give them no advances. These stores foster the habit of improvidence, for the person is compelled to go and spend the money there, else he gets no more money; and if he does get his money at the end of the month (there being only day notices and moment notices in Scotland under a number of these firms), he gets an intimation that he did not spend his money properly on the last occasion, and he gets an admonition.

7094. An admonition from whom?—From the overman.

7095. From the overman who pays him?—From the overman who superintends the work; when that admonition is given, if the man does not attend to it then follows a dismissal.

7096. How do you know that such admonitions are given?—From the testimony of the workmen.

7097. Do you mean from the testimony of many workmen?—From the testimony of many workmen.

7098. They have told you distinctly, that if they did not lay out their money in the stores they would be dismissed; is that so?—In a public meeting of the workmen, when I was present, the workmen stated in the presence of the parties that at some of the pits of Messrs. Merry & Cunningham the workmen were compelled to spend half of their earnings at the stores, or they would be dismissed.

7099. Was there anybody there to contradict that statement if it could be contradicted?—Yes; a contractor was there of the name of Edward Hanlon, who admitted the fact to his own workmen when they charged him with it, that they were compelled to spend the half of their own money there, or they would not get any money at all.

7100. Under whom was he contractor?—Under Messrs. Merry & Cunningham, at Inkerman Works, near Paisley; he admitted that in my presence.

7101. What are these stores?—The stores are places where they sell everything but coffins; I do not think that they supply coffins. I may state further, that they contract for the buttermilk in the district at some of the stores, and the workman cannot get a pint of buttermilk, but it has to come to him through the stores.

7102. They monopolise all the buttermilk?—All the buttermilk of the district; at least, one of them, I know, was doing it up to a very recent period; and I can produce a book, if necessary, where it is marked that the man is to get no money, because he has not spent enough at the stores; and I can produce any number of men to satisfy the Committee that that is the practice.

7103. In order to prevent a man getting an advance, they make a note in his book, do they?—Yes, the storeman makes a note in the book that the money has not been spent with him.

7104. But how does the storeman get hold of the book if the workman has not dealt with him?—If he goes back again with the book, the moment he goes back again he has to show the storeman the book, and he has to show the storeman the amount of money entered in it; that is to say, when he goes from the cash office he has to show the storeman the amount of money that he has received, as marked in the book.

7105. But do you mean that he cannot go to the store when he likes, and say that he wants, for instance, a pound of tea. If he produces the money for it, will not the storeman let him have it without his producing the book?—At the end of the pay he would; but in all cases of cash advances, when you go into the store with the money which you have received, you must produce a book to show how much you have lifted out of the store, and if the storeman is pleased to let you take away one or two shillings, you may, but if he does not choose to do so, you must submit.

7106. The storeman is in the habit, I suppose, of making an entry in the book, stating how much has been spent?—Yes.

7107. And when the workman applies for a further advance, he has to produce this book?—Yes, he has to produce that book.

7108. And then his advance may be refused?—Yes, if he has not spent enough at the store.

7109. And he is liable to be dismissed in addition?—He is liable to be dismissed, if they like.

7110. General *Dunne.*] Supposing that the man chose to deal with somebody else besides the storeman, how would the storeman know that?—If a person does not lift any money at all, the storeman does not see his book at all; and for the sake of cases which might be carried into court, there are always a few men left who are not compelled to deal at the stores; hence a few, perhaps, may be called up here in the masters' interests, who are not compelled to do it; but every person who gets advances of money must show the storeman his book. They have various rules for knowing somehow how much money the man has got; generally it is by showing the book, where the money that has been advanced by the pay clerk is stated. There is a book which the workman has, where all his advances are entered, and he generally has just to carry the book and lay it down along with the money. Then when the storeman sees the money that is entered there, if he is pleased to allow the man to take away 2 *s.* or 10 *s.* he can; on the other hand, if he is not pleased to let him take it away, he cannot take it away; while they pay in cash in the terms of the statute, they destroy the effect of the statute by compelling the man to spend his money.

7111. Mr. *Forster.*] Does a communication take place after the exhibition of the book to the storekeeper, if it is seen to be necessary, between the

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storekeeper and the pay clerk?—That is a point which we only arrive at by surmises.

7112. Will the book shew it?—The book will shew it. It is generally understood that the pay clerk and the storeman compare notes at night of what has been done in the day. The storeman keeps an account of the money that has been spent with him, and tells the pay clerk the amount, or rather he hands back the money to the pay clerk at night. What we understand is this, that the money at the end of the day is handed back to the pay clerk, with an account of those that have made their purchases during the day; and we have known instances where they have paid with bad money, to prevent the parties from going and using the money, and taking it away.

7113. Then further advances, under certain circumstances, are denied?—Yes. I will produce books, to show the marks, if it is desired.

7114. What further steps are taken when the pay day arrives?—The men receive their pay when the pay day arrives, but then they allow their money to lie.

7115. And in the event of a further communication then taking place, what further steps are taken?—The men get a warning.

7116. Are they told why they get a warning?—They are told that they have not spent their money in the store, or that they have taken nothing out of the store, and that they must not do that again.

7117. *Chairman.*] The money is handed from day to day by the storeman to the pay clerk?—Yes; the money received for the sale of goods is handed back to the clerk at night. That, at least, is what is understood by the workmen generally.

7118. So that the goods really belong to the master?—Yes. Mr. Merry, M.P., has his own name on the door, or at least recently, as "grocer and spirit dealer."

7119. Mr. *Foster.*] You have spoken very much of one firm: are we to understand that what you say is applicable to the case of other firms?—It is applicable to the other firms that I mentioned just now.

7120. And what you have told us will apply to those firms that you have mentioned, will it?—Yes, and some of them are still more rigorous than that; some of them do not allow a man to take away a shilling or a sixpence; but in some of the works I have been speaking of, they allow them, after spending 9*s.* out of 10*s.*, to take away 1*s.*; in others, if they spend 10*s.* they allow them to take away 5*s.* But there are cases in which they do not allow them to take away a penny: I may mention the firm of Stewart, of Omoha or Cleland, an iron company. Mr. Stewart was lately provost of Glasgow; he had, up to a very late period, at least, all the buttermilk contracted for.

7121. Then the firm which you have been bringing forward to the Committee prominently have been rather conspicuous by their liberality, have they not?—No, not by their liberality.

7122. They allow one-half to go into the pockets of the men in some cases, and in other cases you say 9-10ths?—In some of the works of Merry & Cunningham, to which I have alluded, they do. Some of the storemen are more rigorous than others, that is to say, in some of them they require more to be left by the miners than in others. In particular stores they have a coinage of their own, and they give the men coins, with which they send them to the farmers and others connected with them to get material, of whom they buy butter, milk, potatoes, and so on. When the workman has gone into the store with his money and laid it down, he says, "I require so much milk." At one store, at Moss End, close by where I live, belonging to William Nelson & Company, they have pieces of tin with certain marks upon them, and the storeman gives one of those pieces of tin to the workman or his wife, and he carries it to the farmer and gets things from him according to the particular mark. I can produce some of those tokens.

7123. *Chairman.*] That is done by some arrangement that has been made between the mine owner and the farmer?—Between the farmer and the storekeeper.

7124. Mr. *Woods.*] You have given the names of several firms where this practice obtains, which I believe that the Committee dislike as much as you do; can you undertake to give us the whole of the names?—I will hand in to the Committee, if they wish it, the name of every store in Scotland where that is done.

7125. Why do they do it; can they prevent other persons keeping shops in the neighbourhood?—They do not prevent other people keeping shops in the neighbourhood, but I can say what they do. Very commonly they have spirit licenses for themselves (the firm I refer to, Merry & Cunningham, have 11 spirit licenses, I think, and they have 11 missionaries too), and they fight to prevent any other person from having a spirit license in the locality, they get the justices' influence to prevent any other person from having a license, so that the whole of the trade must go to them.

7126. What part of the country is this in?—In Lanarkshire.

7127. *Chairman.*] In these districts there are either no spirit shops at all, or very few, except those that belong to the mineowners?—They endeavour to prevent any others coming.

7128. Mr. *Woods.*] The point which I wish to get at is this; what is the mode which they adopt of preventing ordinary people, say miners, who have saved a little money, or any other persons, from keeping shops for themselves?—There is nothing to prevent them.

7129. Are there any such shops in the neighbourhood?—Yes, plenty; but where the truck stores exist no workman will be permitted to keep a shop himself in any of the squares or rows belonging to the employers; they are not permitted to have anything of the kind.

7130. Mr. *Foster.*] At these places are there facilities for the men obtaining provisions at ordinary shops?—Yes.

7131. Mr. *Woods.*] Is it free to the workmen to go to other shops, not being the masters' truck shops; are the workmen employed in any of these firms at liberty to buy at what I may call the open shops?—There are a few of the workmen permitted in each of these works to buy at the open shops regularly. They have all their earnings nearly, if not the whole, at their own disposal; whereas the great body of the workmen who, from the improvident habits contracted, lift their money, are compelled to spend every penny, or such sum as the masters think proper, of the money that they so lift.

7132. How are they compelled?—In this way: that if they take away the money that they get to-day,

to-day, if they go again to-morrow there is no more money for them.

7133. General *Dunne.*] If a man did not want any advance, and waited till he received his money at the end of the month, what then?—The man gets a warning, as I have already stated; he would get a hint, as they call it, that he had taken all the money away last Saturday, and he is to know that that is a thing that is not permitted; and then, after that, if he goes on and does it a second time, he may get another warning; but if not, there is a pretext got up of some kind, and he is dismissed immediately and sent about his business.

7134. Mr. *Foster.*] What class of men are allowed to spend their money at these open shops?—Generally a few of the provident men, the more industrious men, and the best workmen are allowed to go to them; it is upon the improvident, poorer, and ignorant class that the heavy restrictions are put.

7135. *Chairman.*] Then the better class of workmen assert their own independence, and do go to the open shops?—As a rule, they do not assert their independence, but there is an understood permission to a few.

7136. Mr. *Foster.*] From the improvident class being selected as that upon whom more stress is placed in this matter, has that system been, in your view, a benefit to the families in any way by providing that a considerable portion of the earnings are to be spent in necessaries for the families rather than in whisky or other drink?—My experience (and it is confirmed by the complaints that have reached me from wives and children) is, that they will willingly give drink to the drunken, improvident workmen, when they will refuse food to the children in many of these stores.

7137. If the man has money to spend, why should they refuse food for his children, and why should spirits be forced upon that man?—I will explain my meaning. When the man may have nothing lying in the office, if he goes and applies for drink, being an improvident, worthless person, they will give him drink; while if the wife or children were to go for food, they would not give them food. They will give drink to a man on credit, to be deducted from him again when he comes to take out his money; I have complaints in numberless instances made to me of such cases.

7138. Have you every reason to believe in the truth of those complaints?—I have every reason to believe in the truth of them.

7139. Mr. *Woods.*] Do you think that the goods supplied by the truck shops are sold on better or on worse terms than the private trader sells them at?—I have repeatedly had the goods bought from the stores examined by competent persons in the city of Glasgow, and, as a rule, they are a little dearer at the truck shops. But the whole system is fraught with the greatest wrong possible in this way: among the improvident class you find that sometimes they go for a time and they get a little money on with a fair dealer in the neighbourhood; perhaps it may be a grocer in the neighbourhood, for instance, but they fly back into these stores again, and if they will take everything from these truck shops they cover them so that the others can never reach them, that is to say, storekeepers and pay clerks will cover them by preventing their reaching them by arrestment, as they term it in Scotland.

7140. Is not that proceeding in opposition to the Truck Act?—No, they conform to the letter of the law of the Truck Act by paying the individual in the current coin of the realm. We have tried the case frequently to see if it did not come under the category of a device or a collusion, but where the money has been paid, although compelled to be spent as I have indicated, the statute is held to have been complied with.

7141. I suppose that those men who conform to this principle do not object to it, although they may think that it is virtually in violation of the Truck Act?—It is no use their trying to object to it, because it is the universal practice.

7142. Why do the men consent to it. It seems to me that they have it in their own power when there are other shops open to them. Have you ever heard of a case where they have assembled together and said that they would not consent to it?—I have heard of cases, and known many of them, where strikes have ensued in consequence of it, and it is a continual source of division between the employers and the workmen in Scotland.

7143. Have you ever known of a case where the men assembled and agreed to a resolution that they would not consent to it?—Yes.

7144. What was the result?—In the case at Ann Bank, a large colliery in Ayrshire, the men struck for nine weeks against the truck shops, and it resulted in the masters giving them weekly pay, and the power of spending their money where they liked.

7145. Did that put down the system?—It did for a time, but it has come back again.

7146. How did it come back again if the men still resisted it?—The employer kept on the store, and then he just began to lapse back gradually to the old system.

7147. Is this system prevalent in populous neighbourhoods, or in mountainous districts?—In populous neighbourhoods. It is a gross fallacy about their being mountainous districts, and out-of-the-way districts. Wherever a demand arises, supply will at once follow. We have no mines in Scotland that cannot be reached from town in half-an-hour.

7148. That being the case, how is it that the men do not agree to put it down?—They cannot put it down; it is a condition of their employment: and to put it down, they would require to turn out over the whole country.

7149. You are aware that there are some parts of England where it is not the practice?—I do not know any part of England where it is the practice.

7150. That being so, what is the reason that it continues in this part of Scotland?—Because it is very lucrative to the employer.

7151. Why do the men permit it to go on?—It is a condition of their employment; and the only alternative is, that they would have to strike against it.

7152. Why have they not obtained the same redress for this grievance as for other grievances; and why is it continued in this part of the world and not in other parts; what is the distinction or the difference in Scotland?—I can only attribute it to this, that there is a stronger desire on the part of the Scottish employers to make money out of their workmen, than is to be met with in the

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the English employers. So far as the workmen are concerned they are heartily sick of it, and would desire to see it abolished: that is to say, the larger proportion of them. There are a few persons of the description that I have already referred to, that would like to see it continued.

7153. Then why have they not obtained the redress which their own influence would give them to put it down; and why have they not taken measures to put it down?—They have taken measures from time to time; they have struck against it from time to time; they remained out in one instance in the Ann Bank Colliery for some weeks; and in Summerlee they were out for several weeks, and got the monthly pay given up, and fortnightly pay adopted; but after a little the employer goes back, finding so much profit from it, to the old system, and the workmen would just require to strike again, and be in a continual turmoil, and hence they suffer.

7154. How do you propose to put it down; what suggestion do you make?—A more efficient law than that which now exists. Mr. Foster, the Member for Walsall, some years ago, brought in a Bill, which seemed to me to deal with that question properly; and I would suggest that such a Bill as that should be brought in for the purpose of putting it down, by making it penal for any employer to have a shop and continue such practices as are continued by them in Scotland.

7155. How would you put it in force?—In the same way as the Inspection Act, or any other law that ought to be put in force. It is unfair, and besides it is unjust to other employers, to permit it. It enables these employers to get material out of their work and go into the market. In regard to these stores of Merry and Cunningham's, the profits from them (taking them at 15 per cent., which is admitted to be about the truth) must be somewhere about 20,000 *l.* a year; they will not readily give up that.

7156. Mr. *Foster.*] How could you prevent, by Act of Parliament, a person carrying on two or more kinds of trade, if he was so disposed?—The Act of Parliament even now contemplates his not carrying on the trade of a grocer, or of a spirit dealer, and what we want is the law made more stringent; the principle is admitted now; all that is required is, that the principle of the statute be extended to meet this device. The Legislature has already debarred, in its wisdom (and I think, rightly), one of these employers from being a grocer ostensibly.

7157. Sir *Philip Egerton.*] Under the Forbes Mackenzie Act, do you mean?—No, in the Truck Act, and it simply requires the principle to be further developed.

7158. General *Dunne.*] Then your meaning is that the Truck Act is evaded in these instances, and you wish that some legislative enactment should be made to prevent that evasion?—Yes, the Truck Act is evaded.

7159. *Chairman.*] This is a collusion, you say, and an evasion, and you think the Legislature ought to prevent it?—Yes.

7160. Mr. *Woods.*] Why did the men, being able to do so much in the way of redressing several other grievances, not succeed in redressing this grievance?—It would require them to be continually fighting on this question. It is a source of so great a profit to the masters that they would always be requiring to turn out on strike; that is the reason of it; and the poverty entailed by these strikes, in the opinion of the men, would be too great to be continually sustained by them. That is the reason why it is permitted.

7161. *Chairman.*] The employers would fight so hard that they would beat the workmen; that is the notion?—Yes.

7162. Mr. *Woods.*] Have you ever known a case of a private storekeeper, and especially of a private spirit dealer, being put down by his being undersold at the stores belonging to the mine; as a brewery puts down a beershop, for instance?—No, I have not known that. I might mention this, however, in relation to the matter of stores. At the large works belonging to the Messrs. Baird's stores, were carried on till some few years ago, when one of the partners of the firm stood for the Falkirk Burghs. On my representation that the workmen felt these stores to be a very great annoyance, Mr. George Baird then gave orders (at least it followed that the orders were given in a day or so) that there should be no more compulsion upon the men to spend money in the stores. They have, since that, put a number of their stores on the principle of co-operative stores, and the workmen hold them in their own power. Where they have one or two stores they pay the workman in advance, but there is no compulsion; and generally, in the two or three stores of theirs that they have on that principle, they sell cheaper than the dealers in the district; and they are able to do so, because they sell on the ready-money principle entirely, and never sustain a loss.

7163. Sir *Philip Egerton.*] That system is satisfactory to the workmen, then?—It is in that case, except for this, that its continuance in any form is dreaded by the workmen, because another class of managers might arise, and the system under which they formerly worked might be adopted.

7164. *Chairman.*] Do I rightly understand you to say that the masters have any interest in these co-operative stores?—They belong to the workmen. The masters have some advantage in them; to a certain extent they are partners.

7165. The shares of the masters are not very considerable, you mean?—I understand the shares of the masters not to be very considerable; the managers and others have more shares.

7166. Mr. *Foster.*] Do you consider that the system of such stores as you have spoken of, carried on conjointly by the men and the managers, and to some small extent by the proprietor, is beneficial to the district?—Yes, it is beneficial to the workmen.

7167. As affording to the men a means of investment for the profits of their earnings?—Yes, decidedly.

7168. Is what you have stated at all on the increase in Scotland?—Yes, the principle of co-operation is generally on the increase in Scotland.

7169. Should not the power of the men to avail themselves of that be an additional reason for the men to put down this truck system that you complain of?—Yes, if they could do it; that is to say, if they could get the money to do it, but the month's pay and the barrier of instant dismissal hangs over them.

7170. Do not you think that the unfortunate practice of the men spending so much of their earnings

earnings in drink and superfluities rather tends to render them unable to enter into these co-operative societies?—Yes, it does.

7171. *Chairman.*] You have heard most of the evidence given here about weighing and measuring, have you not?—Yes.

7172. Do you concur in the statements that have been made as to the advantage of weighing over measuring?—I concur in the rule put in by Mr. Normansell as one that would be favourably looked upon by the men. I may state this in reference to the weighing, that for the last quarter of a century I believe more strikes have occurred in Scotland on this matter than it is possible to conceive of, and a very strong feeling exists on the matter; and upon this subject too the men have sought every means of relief that they could from the authorities. They have gone by deputations to the sheriff of the county, and they have appeared before the commissioner of the county, but the law does not apply to coal mines. The men therefore are anxious that there should be a law making it the duty of the inspector of weights and measures to visit and examine the weights at the pit's head, as all other weights and measures.

7173. Is the work all paid by weight?—In a number of cases the contract is by measure, but the measure is founded on a certain weight, so that weight is the basis of all the contracts in Scotland in reference both to coal and iron.

7174. And you would wish measure to be entirely excluded, as I understand you, and that it should be simply and entirely by weight?—Yes, that is the feeling of the workmen.

7175. And you have a very strong opinion to that effect?—Yes, a very strong opinion; and if the Committee would have the inspector of weights and measures here, and the sheriffs of the counties as well, they would hear the bitter complaints that have existed for a long period upon this matter.

7176. How has that come before the inspector of weights, if he has had no authority in the matter. How come the workmen to go to him if he has no right to interfere in the matter?—Ignorant men still entertain the opinion that he has a right to interfere. The inspectors of weights in Scotland are in a number of instances inspectors of police; and being inspectors of police, the men think that they have a right to interfere in civil contracts, and they go to them. I could mention names if it were wished.

7177. Sir *Philip Egerton.*] Are they under the same Act as to weights and measures in Scotland as in England?—Yes; but the inspectors have no power unless there are goods sold.

7178. But the inspector of weights and measures would have power to examine the weights in the stores?—Yes, the inspector of weights and measures would have power to examine the weights in the stores, and he goes and examines the weights used for the working in the malleable iron works; but he does not go to the pit's mouth; that is the peculiarity of it.

7179. They are not empowered by law to examine the weights at the pit's mouth?—No.

7180. Mr. *Woods.*] What are the weights for at the iron works?—They get their work at so much per ton.

7181. Sir *Philip Egerton.*] When you speak of the iron works, do you mean smelting works?—Yes; it is not pig-iron.

7182. *Chairman.*] Have you any special rules to put in?—Yes (*handing in a book of special rules*); there are two classes of special rules for the district. In the eastern and western districts there are two inspectors, and the men object to the special rules.

7183. Have you any objection to make to the mode in which the special rules are framed?—Yes, we have.

7184. What would you suggest on that point?—The special rules that are now in operation, were framed in 1855; they were framed without any intimation whatever with regard to them, being given to the workmen, and they have continued in operation since then.

7185. Have there been no special rules established in Scotland since the passing of the Act of 1860?—No special rules have been established in Scotland since 1855. In the Statute of 1855 there was the power granted to form special rules, and the special rules that were adopted then are carried on now without any alteration.

7186. You have put in some special rules, and you say, as I understand you, that most of the special rules, if not at all now in force in Scotland were made under the Act of 1855, and that they have not been altered since?—Yes; in 1855, when these special rules were adopted, a very strong feeling was excited among the workmen against them, and a representation was made then to the Home Secretary, who appointed a person to investigate the thing.

7187. What special rules are you speaking of?—The whole of the special rules are objected to by the workmen.

7188. To what district do the special rules that you allude to, apply?—The Scottish special rules are nearly all the same.

7189. Was this representation then, to the Home Secretary, to which you have referred, a representation on behalf of the whole number of workmen?—On behalf of about 9,000 workmen.

7190. Including a great many different collieries?—Including a great many different collieries in Ayrshire and Lanarkshire, and in the county of Fife; they were resisted altogether, and a strike ensued.

7191. What happened in regard to the representation to the Secretary of State?—In 1856 a representation was made to the Home Secretary by over 8,000 workmen, and he appointed as referee a Mr. Landel, in Edinburgh, who made a slight alteration in one of the special rules, but these special rules still remain unsatisfactory.

7192. The special rules did come before the Home Secretary, and he reviewed them, and, with slight exceptions, approved of them; is not that the case?—He remitted the matter entirely to Mr. Landel, in Edinburgh.

7193. And that gentleman approved of the rules, with some trifling exceptions, as I understand you?—Yes; but he is a person who was largely in the interest of the mine-owners, and we might just as well have had a mine-owner making the rules.

7194. He reported to the Secretary of State, I suppose, and the Secretary of State adopted his views?—Yes, the Secretary of State adopted his views.

7195. But the workmen, you say, have continued

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tinued discontented with the special rules ever since?—Yes.

7196. To what special rules in particular do the workmen object?—The workmen object to the special rules generally, on the ground that there is an effort by means of them to lay responsibilities upon the workmen themselves which should be entirely borne by the employer. For instance, in rule 3d of the special rules, we find the following rule, which is very much objected to by the workmen; that, besides the intimation of apparent safety given by the firemen, colliers must satisfy themselves of the safety of their working places before commencing to work. Now the workmen are of opinion that that shifts the responsibility of ventilation from the shoulders of the employer on to the shoulders of the workmen themselves; and hence, if through inexperience or through any want of knowledge the workman goes into a mine filled with fire damp, or black damp, the whole responsibility devolves upon himself and not upon the employer, in a court of civil law, in the way of compensation.

7197. Sir *Philip Egerton.*] Is it your opinion that a special rule can override the general rules?—It is my opinion that the special rules can certainly override the general rules, in so far as this, that under such a special rule as this, if a man should fire his place he is liable to pains and penalties (which his employer, as an employer, is not liable to even for having the mine in a foul state) in every instance for not looking to his personal safety, although the real cause lay in the employer's not having the mine properly ventilated.

7198. And that is what you wish the Committee to understand when you say that the responsibility would be shifted from the employer on to the workman?—Yes, the entire onus in that rule is thrown upon the workmen.

7199. *Chairman.*] As I understand, one of your objections to that rule is that that there may be an inexperienced workman, who really is not competent to satisfy himself as to the state of the working place, and that the fireman is likely to have trusted to him, knowing that the workman must look at it himself, and that in that way an accident may happen, the fireman not exactly knowing what workman it is that is going to this place?—Yes.

7200. Mr. *Foster.*] Are not these rules rather intended for the special guidance of the men employed in the mines?—Yes, they are for the guidance of the men employed in the mines.

7201. And is it not a salutary precaution that, in addition to the duty of the fireman upon whom the responsibility rests, the workman himself should also, by all the means in his power, ascertain the safety of his working place before commencing to work; that the man, in fact, should be obliged to notice the state of his working place before he commences to work in it?—To the salutary precaution the workman would have no objection, but when they find the precaution converted into a responsibility they do object to it.

7202. It is a matter of opinion, I presume, whether that rule relieves the fireman from the responsibility, and places it upon the workmen; would it not be a very unwise thing to erase such a salutary precaution as that from the special rules?—The workmen in Scotland are strongly of opinion that if such a rule was submitted to either a sheriff unbiassed or a lord of session, they would permit no such special rules as there now are, rules having the effect of changing the responsibility from the shoulders of the employer to the shoulders of the workmen. We are convinced of that; and we find in actions at law, that if we go into court the man is held to be bound to have seen to his own safety, no matter how much it may have been the fault of the employer.

7203. *Chairman.*] It prejudices the man's right of action; that is your view?—Yes, it prejudices his right of action.

7204. And it also exposes him to a penalty; he is liable to be had up before the magistrate for neglecting the rule, is he not?—He is liable to be sent to prison. There is no dubiety whatever about the workman's duty, under these special rules. If he neglects a single rule, then he can be brought before the magistrate, and is brought before a magistrate, and is sent to prison. Under the general rules the employer is responsible; but we are all at sea in regard to them; we know nothing whatever of them.

7205. Is there any other special rule to which the workmen object?—We object entirely to the mode of framing the special rules, apart from the rules themselves.

7206. Will you tell us what you think should be the mode of framing the special rules?—We think that the special rules should be framed, and lodged with the sheriff's clerk of the district; and that, instead of being submitted to a mining engineer, where it is a question of law and contract, the parties should be heard in a cheap and easy form before the sheriffs of the district, and copies of the rules should be kept by them.

7207. By the parties, you mean, I suppose, the employers on the one hand, and the workmen on the other?—Yes. The parties should be heard before an independent party, such as a sheriff or a lord of session. The rules should be approved in that way, I think, instead of by the Home Secretary.

7208. The workmen have an opportunity of communicating their objections to the Home Secretary now, have they not?—They have.

7209. Do you think that, in the way in which the special rules are now framed, there is sufficient notice given to the workmen?—No, they have no notice; in fact, they could not possibly have any notice of the special rules which were under the Act of 1855.

7210. Have you looked at the present Act, with regard to this subject?—I know it perfectly well.

7211. Is there anything that you have to suggest in reference to the framing of these rules?—The present Act requires them to be hung up for 14 days, and then submitted, after that, to the Secretary of State. We would suggest that they should be taken out of the Secretary of State's hands altogether; that, if possible, all these special rules at present in force should, on a given day, be brought to an end, and new rules be framed in the terms of and in harmony with the existing statutes.

7212. Do I rightly understand you to say that you would wish the law to put an end to all the existing special rules, and to require a new set of special rules to be made in lieu of them?—Yes, so far as Scotland is concerned.

7213. Are you satisfied with the mode of giving notice to the workmen of what the special rules are

are proposed to be?—No; I should wish notice to be given to the clerk of the sheriff.

7214. How are the workmen to hear what the rules are; who is to give notice to the clerk of the sheriff. Now, the projected rules are hung up for 14 days, and you say, as I understand you, that you are not satisfied with that mode of calling the attention of the workmen to the proposed rules?—We are satisfied with that part of it.

7215. You think that that is quite sufficient notice, do you?—It is quite sufficient notice, but it is the absolute disposal of them that we object to.

7216. Are you satisfied with the place where the rules are hung up; are they hung up in a place where they accessible?—Yes, quite.

7217. Then you think it is their own fault if the workmen do not know what the special rules are proposed to be?—Yes; there are many of the workmen who cannot read, but the rules are hung up in a sufficiently accessible place.

7218. Is there any other particular special rule to which you would wish to call the attention of the Committee?—I think that it is unnecessary to go into the special rules in detail, because we hold them to be objectionable as a whole. I might take as another illustration Rule 18, which is this: "As removing falls from the roofs of roads and air-courses, repairing defects, and supporting loose strata, are within the roadsmen's duties, and as they are charged with the maintenance of all roads and passages in the colliery, they are enjoined to proceed with the greatest caution, both for their own safety and the successful execution of their duties. In these operations the whole risk of accidents must necessarily lie with themselves; they must, therefore, be careful, and are required to prevent all other workmen coming near any defective places, or interfering with them when at work. They are required to undertake no repairs of unusual magnitude or danger without sufficient assistance, and until provided with every necessary material, which will be supplied on application to the employer or manager."

7219. What is your objection to that rule?—The objection to that rule is, that the class of men who are appointed for that description of work are generally the most ignorant men, and not skilled at all; and therefore there is a great risk of accidents to themselves, because it is a most dangerous kind of work. Many of the men who have that work to do are totally ignorant of the nature of the work, and of the difficulties by which they are surrounded.

7220. Too much is thrown upon the roadsmen, you think, as I understand you?—Yes, too much responsibility is thrown upon them.

7221. What are the class of men who are employed for that work?—They are an inferior class of workmen.

7222. Have they lower wages?—Yes, they work at night generally.

7223. But are they not directed or superintended by some one who is competent to look over them?—There is no order for direction or superintendence; the risk is entirely on the man himself.

7224. Are there not under-ground overmen?—Sometimes there are under-ground overmen, and sometimes not.

7225. Your opinion is that the men who have this work of which you have spoken are not fit to be trusted to do it, and that the superintendence is not sufficient?—Yes.

7226. Is there any other rule to which you wish to call the attention of the Committee?—No.

7227. But you object generally to the rules, and to the mode in which they are framed?—Yes.

7228. Sir *Philip Egerton.*] Those special rules were framed under the 19th and 20th of Victoria, you have told us?—Yes.

7229. In your opinion, could those rules be amended by taking advantage of the provisions of the last Act of Parliament on the subject?—They could be amended by taking advantage of the provisions of the last Act of Parliament. I believe that the workmen would make representations for that purpose.

7230. Have the workmen made representations to their masters that the special rules which were framed under the last Act are objectionable to them?—They made representations to the masters; they struck work, and they made representations to the Home Secretary.

7231. How long ago was that?—In 1856.

7232. Has there been no representation made to the Home Secretary since 1856?—They have made applications to Parliament every year, but the cost of carrying on the agitation was too great.

7233. Have they made any representation to the Home Secretary since the passing of the last Act in 1860?—No, they have not made any representations since then, except by the presentation of petitions to Parliament.

7234. Do not you think that a representation to the Home Secretary under the last Act of Parliament would be attended with benefit to the workmen?—I do not think that Sir George Grey would give the men any relief.

7235. Do you think that if the representations of the men were well founded, the Secretary of State would turn a deaf ear to them?—If we were handed over again to mining engineers it would be the same thing as it has been before.

7236. You are begging the question; how do you know that you will be handed over to mining engineers?—The statute says that that shall be the way in which the thing shall be done.

7237. The workmen have no power under the Act of Parliament, at present, in framing the rules, as I understand you?—No power.

7238. And you wish that the workmen should have some voice in framing of them?—Yes.

7239. Mr. *Foster.*] Is not the safety and protection of the workmen generally provided, or meant to be provided for, by the general rules?—Yes.

7240. And are not the special rules rather intended to come immediately from the employer, for the guidance and conduct of the men who are under his employ?—That is the object of the special rules.

7241. They are more considered master's rules than men's rules, are they not?—They are more considered master's rules than men's rules in the ordinary sense of the terms; but again I come back to the original point, that we feel that those master's rules nullify the general provisions of the statute, by throwing responsibilities upon the workmen that do not belong to them under the general rules.

7242. But do you consider that any special rule could override a general rule or relieve a master

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master from any responsibility imposed upon him under the various clauses of the general rules, they being part of an Act of Parliament?—I do, and I will explain that statement of mine. The general rule says that the owner shall dilute and render harmless the noxious gases in the mines to such an extent as that the working places of the pit shall be in a fit state for travelling and working therein. That is a responsibility upon the employer; then the special rule steps in and says to the workman, that before commencing his work he shall examine as to the safety of his working place, and while at work he shall continue to examine the place with respect to its safety as to gas, and if he neglects to see that gas, as is required by the special rule, he is liable to be brought up and sent to prison for two months, or to be fined, according to the will of the magistrate, for not attending to the very thing which the general rule contemplates that the employer shall do, when it says that he shall render harmless the noxious gases. Thus there is really not only a civil liability, but a criminal responsibility placed upon the workmen.

7243. Sir *Philip Egerton.*] But previous to the inspection of those workings by the workmen, they have to be inspected by the firemen, have they not?—Yes.

7244. And the firemen are appointed by the masters?—Yes.

7245. Then does not the responsibility in reality rest upon the firemen, and is not the special rule to which you object merely a rule in addition, in order that the workman may satisfy himself of his own safety before commencing to work?—The fact is that the fireman is a collaborateur of the workman.

7246. The fireman is appointed by the master, you say?—The fireman is appointed by the master, but he is a collaborateur of the workmen, and the responsibility of the firemen is not worth a farthing. The responsibility is thrown upon the firemen, and it is also thrown upon the workmen, and between the two the owner gets out of the responsibility altogether.

7247. But the fireman, as I understand, in all well-conducted mines has to inspect the workings before the workmen go into them, in order to see that they are in a fit state for them to work in?—Yes.

7248. He is responsible for certifying that the works are in a fit condition for the men to go into them?—Yes, but the responsibility lies with a fellow workman.

7249. The fireman is appointed by the master, you have already admitted?—Yes.

7250. How then can he be a fellow workman in the way you indicate?—The law holds him so; I cannot say how it is.

7251. Even if he be a fellow workman he may be responsible to the master, may he not, and the master is responsible, under the general rules of the Act of Parliament, for seeing that the mine is properly ventilated?—There it comes back to the same point again; the effect is, that the master is not responsible.

7252. *Chairman.*] Are you not referring to a recent decision of a court of law, by which it was held that one workman could not maintain an action against his master for an injury accruing to him from the neglect of a fellow workman?—Yes.

7253. And under that decision therefore he would get no remedy against the master under the first general rule, because the master would say, "This accident arose from the negligence of a fellow workman of yours, namely, the fireman, and therefore there is no remedy"?—Yes, that is the decision of Reed and Maguire in the case of an engine keeper. The fireman's responsibility is just the same as the workman's. At the end of the special rules there are words to the effect that the violation of any of the foregoing special regulations exposes the offender to a penalty of 2*l.*, or to imprisonment for three months. The fireman, for the neglect of his duty, is liable to the same as the workman; but for the neglect of the fireman there is no relief against the employer, although it may be from want of ventilation that the accident has occurred; and these rules are studiously, from the beginning to the end of them, framed for the benefit of the master; they were framed, indeed, by a legal agent for the purpose.

7254. You do not conceive, do you, that when a fireman was had up for neglecting his duty, he would be able to plead, "Oh, but it was the business of the workman to look at the place himself;" that would not discharge him, would it?—Yes; he might plead that, and get off with that plea.

7255. Do you think that it would do him any good to plead that?—Yes.

7256. Have you known cases where the fireman has pleaded that?—Yes, I have known cases where the fireman has pleaded that.

7257. And the plea has been allowed, has it?—The plea has been allowed, on the ground that an accumulation has taken place after the fireman had left the place; in that way the master has delegated his responsibility to the fireman, and gets rid of the first general rule altogether, when he imposes a penalty upon the workman for not seeing to his own safety, and the court convicts the workman for not seeing to his own safety. Would a court ever be found to convict the employer for not having the mine ventilated.

7258. Is there any other point on which you wish to give evidence to the Committee?—In regard to these deductions of which I have spoken, I wish, on behalf of the men, to say clearly, that as to smiths' and doctors' fees, and school fees, the workmen do not object to paying for schools, but they object strongly to having to pay for them, and at the same time having no power whatever in the management of them; and more particularly the Roman Catholics, who are compelled to pay for Protestant teachers.

7259. You did not mention the smith before; are the workmen compelled to have their tools from a particular smith?—Yes, they are compelled to have their tools done up at the smith's shops.

7260. Is that practice common in Scotland?—Yes.

7261. And do they conceive that they pay more for the smith than they ought to pay?—They think that what the smith gets from the workmen pays him for all the work he does, and more than that. I am convinced that the master gets a profit. I believe that in almost every large work there is a direct profit made by the employers out of the blacksmith.

7262. What is the amount obtained from each workman a week?—Threepence per week.

7263. For having his tools sharpened?—Yes.

7264. Does

7264. Does that go for anything else besides sharpening?—No.

7265. If he breaks his tools, is that included?—No, he pays for that in addition.

7266. Sir *Philip Egerton.*] Are candles purchased at the stores?—No candles are used in Scotland; oil and tallow are used in lamps.

7267. You have no blasting, have you, in Scotland?—Yes.

7268. How is that provided for?—The powder is purchased at the stores.

7269. Have you any accidents in the blasting?—Yes.

7270. Do those accidents happen from incautiousness on the part of the workmen?—Yes, from incautiousness on the part of the workmen in boring out, amongst reddsmen, and such men. I know many instances of men who have been maimed and injured in that way.

7271. By boring out, you mean opening out a shot which has missed fire, do you not?—Yes. Another very common cause of frequent accident is what is called stamping, or tamping as they call it in this country, using iron needles, or steel needles, and not copper needles.

7272. Do you use iron tamping rods, or copper tamping rods?—Some use iron and some copper; no accidents occur from the copper tamping rods.

7273. What is the objection to using copper tamping rods and copper needles throughout the country?—The cost, I suppose.

7274. The prime cost is greater, but the wear and tear is less, is it not, when copper is used?—Yes, ultimately they are cheaper. I think that the cost is the only cause of its not being used.

7275. Did you ever hear of bronze tamping rods being used?—Yes, I have seen them; but I am not aware of any being used in Scotland.

7276. They are very durable, are they not?—Yes, they are very strong.

7277. There is a good deal of grit in the material which you use for tamping, I believe?—Yes, there is generally.

Tuesday, 29th May 1866.

MEMBERS PRESENT.

Mr. Clive.	Mr. Greenall.
General Dunne,	Mr. Kinnaird.
Sir Philip Egerton.	Mr. Liddell.
Mr. Fawcett.	Mr. Neate.
Mr. Wm. Orme Foster.	Mr. Hussey Vivian.

CHARLES NEATE, Esq., IN THE CHAIR.

JOSEPH DICKINSON, Esq., called in; and Examined.

J. Dickinson, Esq. 29 May 1866.

7278. *Chairman.*] How long have you been acting as Inspector of Coal Mines?—Since November 1850.

7279. That was the first inspection, I think?—That was when the first inspectors were appointed. Mr. Dunn, Mr. Morton, Mr. Blackwell, and myself were appointed then.

7280. How many were appointed then?—There were four inspectors appointed then.

7281. And you have continued to act under the different Acts which have been passed down to the present time?—I have.

7282. Was any addition made to the number of inspectors by the 18 & 19 Victoria?—Before that. It was found that the districts were too large. For instance, I myself had all Lancashire, Cheshire, North Wales, Staffordshire, Shropshire, and Worcestershire at the commencement, and Mr. Dunn had all Northumberland, Durham, and Scotland. Our two districts were divided.

7283. When was the first addition made to the number of inspectors?—That was about a year and a half after the first appointment.

7284. When was the next addition made to the number of inspectors?—The next addition was made about 10 years ago; the inspectors were then doubled and made 12.

7285. Do you mean by the 18 & 19 Victoria?—Shortly after the passing of that Act.

7286. Was any increase made by the Act of 1860?—The Act makes no increase; it is the Secretary of State who makes the increase; he has the power to appoint what number of inspectors he considers requisite.

7287. Has there been any increase since that Act?—There has not.

7288. You have gone on with the number, 12, since the Acts of 1855?—Yes.

7289. I believe you are prepared to give evidence with regard to the way in which the different Acts have worked. Has there been any great improvement since the last Act of 1860?—The first Acts were by no means complete; indeed they were very incomplete; but the present Act is a very good Act.

7290. I understand you to say that there has been a considerable improvement in the working of the mines, in compliance with the intentions of the Legislature since the passing of the Inspection Act of 1860?—Very considerable indeed. I do not think that there is any trade in which such great improvements have been made in so short a time as there have been in collieries since the commencement of inspection.

7291. What are the points in which you have chiefly noticed improvements?—The managers seem now to be much more alive to their duties than they were.

7292. Are they a different class of managers, or is it that they attend more to their duties than they did?—I think they are better up to their duties than they were.

7293. Should you say that there has been a greater selection exercised in the choice of them?—No. I think the Act has been the means of bringing home to them what their duties really are, and which formerly were left pretty much to take their chance.

7294. The two points which the Committee have chiefly directed attention to, have been the employment of women and children, and the ventilation of mines. Have you noticed any great improvement in the compliance with the law as to the employment of children?—The restriction that was put upon the employment of children by the Act of 1860, has been the means of giving a little impulse to education, and has, I think, perhaps as far as it has gone, done some good, but it is not an unmixed good. There are cases of hardship which now and then start up before us on putting the Act in force. Perhaps we find that a boy has been killed in the pit who was under the age specified, and that the Act has not been complied with in regard to the certificates. In such a case, in accordance with the instructions which we have from the Home Office, I, in my district, put the Act in force for the penalty, and that may fall perhaps not upon the colliery owner, but upon the father or the guardian of the boy; and to that extent we do not carry public sympathy with us; it is looked upon as a hardship.

7295. In what way does the employment of boys come under your notice as inspector. Are you sure to know of it if boys are employed contrary to the law?—No, we are not sure to know of it; but if there should be any colliery in the district where there are boys employed under the specified age, there is generally some one to call our attention to it.

7296. You do not take means to ascertain whether there are boys employed under age without certificates?—There are a number of people

people who put themselves in communication with us, and send word to us if boys are employed contrary to the Act.

7297. What steps do you take then?—We at once go to the colliery and ascertain whether it is so or not, and if we find that the statement is true, and that they have not been sinning with their eyes open, the boys are at once discharged, and things go on right; but if we found that they were employing these boys knowingly, then for my part, I should put the Act into operation against them, and have the penalty enforced.

7298. That would be the penalty of 20 *l.*, I suppose?—No, it would be the penalty under the 5 & 6 Victoria; it is not exceeding 10 *l.*, and not less than 5 *l.*

7299. What is your present district?—It comprises all Lancashire, except Wigan and St. Helens.

7300. How long have you been restricted to that district?—Since the number of inspectors was doubled.

7301. That is to say within the last 10 years?—Yes.

7302. Have you reason to believe that the practice of employing boys under age (by under age I mean under 12) is very common?—There is a constant pressure on the part of the miners themselves to get their boys employed under the age, and there are constantly some boys getting squeezed in before they are old enough.

7303. Should you say that the boys employed under age are generally the children of miners?—Almost invariably.

7304. Is that pressure to which you allude, from the miners general, or only from some of them?—It is from those who have boys that they wish employed.

7305. Is there a general desire among the miners to have their boys employed?—I should say so; it applies to everyone who has a boy whom he wants employed.

7306. Are not you aware of a feeling among any of the miners not to have their boys employed?—No, I do not find it so practically.

7307. Do not you know of any miners who do not have their boys employed under 12?—No, I do not.

7308. We have had from the workmen whom we have examined evidence of a general desire among the better class of workmen to restrict the employment of boys, to boys above the age of 12; are you aware of that feeling?—I am quite aware that the Committee have had such evidence before them, but I am in duty bound to tell you that it is contrary to what I find in practice. When I go to a colliery and have these boys discharged for being under the age, I am looked upon there by these people as an intruder, and there is no sympathy shown with the inspector in having these boys discharged from the colliery, nor is there sympathy with him when he puts the Act in force, for a penalty in the case of a boy who has perhaps been killed in a pit, and who was under age.

7309. Should you say that it was a common thing to employ boys under 12 without a certificate?—No, I am not aware that there is a single case of that kind in my district. Certificates are generally used. In some collieries we have as many as 20 certificates.

7310. What is your own opinion as to prohibiting boys under 12 from working in mines?—I think that the present restrictions have done good, but I would not recommend their being carried any further.

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7311. Have you noticed that working in the mines produces any bad effect upon the health or appearance of the boys?—Colliers generally are sallow, not having the light of day upon them.

7312. Are they stunted in their growth?—No, I should say not. Colliers generally are not tall men from having to work in constrained positions, but a boy feels that much less than a grown up person.

7313. And you see no objection (or at least no objection sufficient to induce legislation) to boys of the age of 10 being allowed to go into the mines?—I should not extend the restrictions further than they go now, and even as far as they go now they are not popular with the general body of working miners that I come in contact with.

7314. Assuming that boys are to be allowed to go into the mines at the present age (and you mean under the present conditions as to certificates, of course), do you think that any restrictions should be put on their hours of labour?—No, I would put no further restrictions upon them than there are now. If there were no such thing as poverty you might put further restrictions, but these working people have their living to make in the world, and perhaps no class of workmen are more exposed to accidents than colliers, and if the father should be killed, the mother must get her boys employed as soon as she can. There is, in fact poverty, and it must be looked at, and you must look at the injustice which you would occasion in a large number of cases if you put further restrictions.

7315. But supposing that a greater restriction was put on the employment of boys, would not the effect be to raise the wages of men and to cure the evil in that way?—No doubt of it.

7316. But that would not apply to the case of widows?—It would not.

7317. Then the great hardship you speak of is a hardship of a limited and exceptional character, is it not?—It would be one of that kind which perhaps elicits our sympathies most, and looking at the large number of miners who are killed, as well as those who die, it is not so limited as a person might be led to suppose.

7318. Do you think that it is better for a boy to be sent at that tender age into a mine, than for him to be sent to an industrial school, or a pauper school?—Yes, I think it is; I think that if you were to keep boys from going to work with their parents until they were 14 years of age, the parents being at work the boys would be very apt to get into mischief if there were no one to look after them.

7319. The question is rather between 10 and 12, than between 10 and 14. Is there any employment for boys up to 12 years of age in the Lancashire district?—Yes, there are a large number of boys between 10 and 12 employed in my district.

7320. Is there any employment for boys of that age except as mining boys?—Yes, there are factories.

7321. Which is the best employment for boys, the factory employment, or the mining employment?—The factory workers are a separate class from the colliery workers; they run in different grooves.

7322. What would become of the boys up to 12 years old, if they were excluded from the collieries?

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collieries?—If you excluded boys up to 12 years of age from the collieries, in the thin mines, where the mines are about two feet thick, you would never get them to go into them at all. In the thick mines I believe boys would be induced to go in after 12 years of age.

7323. Then, it would be difficult to work the thin mines, if boys did not go into the mines till they were 12?—I think that the thin mines would be, to a great extent, laid in, if that were the rule.

7324. Would there be sufficient factory employment for them if they were excluded from the collieries?—At present there is a demand for any amount of labour in the factories in Lancashire.

7325. Then, there would be a great demand for boys, you think?—No doubt of it; and there is a great demand for boys in the collieries also.

7326. So that, looking to the present demand for labour in Lancashire, it would be no very great hardship to the boys, or to their parents, if they were excluded from the mines?—But one must bear in mind that there is not a factory at every place where there is a colliery; there are many colliery districts where there are no factories, and where, therefore, there is not this employment.

7327. In those places they would have no work if they were excluded from the mines?—In those places they would have no work.

7328. And their parents could not afford, you would say, to keep them at school till they were 12 years of age?—No; they would have to fall upon the poor rates, which is not desirable.

7329. You think that the effect of excluding boys up to 12 years old from working in collieries would be to pauperise a great many of the working miners?—I think so, where there is no one to provide for them.

7330. Although it would tend to raise the wages of the men?—It would.

7331. What are the habitual wages of a working collier in Lancashire?—I should say that the colliers are getting from 4*s.* to 7*s.* a-day.

7332. A man must work very hard, I suppose, to get 7*s.* a-day?—They do work hard; there is no doubt that colliers work very hard.

7333. Suppose a man gets 7*s.* a-day, he can keep his family without the help of the earnings of his boys, cannot he?—Yes.

7334. Do you think that the higher class of miners, who are earning as much as that, still desire to have their boys working with them?—That is my experience. I do not meet with the colliers who wish any further restrictions, and I do meet with a large number who think that the present restrictions go too far.

7335. As to women, women are very commonly employed in Lancashire at the pit's mouth, are not they?—Yes.

7336. What have you to say upon that part of the subject?—In Lancashire, I am happy to say, we have a very industrious people, all disposed to work; and if you were to debar these women from working on the pits' banks, you would debar them from many comforts which they now enjoy.

7337. Are you aware of any evils arising from the employment of women?—I am not; I believe them to be as moral a class of women as are to be met with in any district of England.

7338. Is there any indecency in the way in which their work is carried on?—No.

7339. Or in their dress?—Not the slightest; they are as decent and tidy women as you would meet with in any occupation.

7340. Are you aware of the existence of any feeling among the working miners against that employment of women?—The delegates, or as they are now called, the colliers' agents, are moving strongly against it; but I do not think that that feeling exists amongst the families of those who have women employed.

7341. Do you conceive, then, that the agents do not truly represent the feelings of any considerable number of their constituents?—On that point, I think, they are considerably ahead of the feeling of the county and of the feeling of this country generally.

7342. But are you aware of the general body of workmen having protested in any way against the representations made on their behalf by the agents?—I am aware that some of the men have done so; and I have seen nearly every woman in my district, and unanimously they are opposed to being understood in any way to wish it interfered with. It has been stated to me in the colliery districts that the views of the working miners have been misrepresented on that point.

7343. Have you heard that since this inquiry has been going on?—I have.

7344. You have a very decided opinion in favour of letting the employment of women go on as it exists now?—I have a very strong opinion with regard to not interfering with any persons who wish to earn their bread by labour, to let that be as free as you can possibly leave it.

7345. Have you ever been conversant with any mining district where women were not employed?—There are parts of my own district now where women are not employed.

7346. What do the women do there?—They generally work in the factories.

7347. Is there any desire amongst the women in those coal districts to get employment on the pit's mouth?—No, I should say not. Where the women are employed, it is generally at collieries which are not land sale collieries; that is to say, where the coal is not carted away, and most frequently where there are not a large number of factories in the district. Where there are a large number of factories in the district, the women appear generally to give the preference to that kind of work; where they have the chance, they generally give the preference to it.

7348. Have you compared the women in the districts where they do not work at the pit's mouth with the women in the districts where they do work at the pit's mouth?—I know the women of both districts, and I may say that I believe that the women who do work on the pit's bank are as moral as the women of any district. I know them, not only in Lancashire, but I have been where women have been employed in South Wales, and in many parts of the country as well as in Lancashire, and I do not confine my opinion on that point to my present district.

7349. Is there any difference in the men; are the men a more refined or a more civilised set of men in the districts where the women are not employed at the pit's mouth?—I do not think there is any difference, because, as I say, the Lancashire people are an industrious population, and if the women are not employed on the pit's bank they are employed as house servants, or in the cotton mills; idleness amongst the women seems to be a thing that they do not think of. They have good wages, and live well and dress well.

7350. So

7350. So that whether the women are employed in the factories or at the pit's mouth, they are practically usually employed away from home during the day?—Very frequently.

7351. Is it a rare case, then, to find a woman staying at home, and taking care of her children, in that district?—No; when a woman is married and with children, you do find her staying at home.

7352. Then they do not work in factories or collieries where they have children?—Not in many instances.

7353. Mr. *Liddell.*] You have stated that, in your opinion, the Act of 1860, which prohibits the employment of boys below 12 years old, unless they attend school, is not an unmixed good; and I think you illustrated that by saying that you find yourself occasionally, in cases of death by accident, enforcing the penalty for breaches of the Act against parents or guardians of children?—Yes, owners or managers.

7354. I want to know, why it is only in cases of death by accident that you find yourself compelled to enforce the penalty of the Act?—That is not so; but, supposing it was reported to me that there was a boy being employed under the age and without the specified conditions, then, as I have stated already, I should go to the colliery, and if I found that this boy had been employed without the knowledge of the manager, and that it had been an inadvertance, the boy would be merely discharged, because there would be no useful end obtained by proceeding for the penalty; but if I found them sinning with their eyes open, I would put the penalty in force; that is to say, I would report the matter to the Secretary of State, in order that proceedings might be taken; and, in doing so, I am acting exactly under the very excellent instructions that we have from the Home Office.

7355. I quite understand that; but I do not understand why, in the event of a child being unfortunately killed, it is found necessary to enforce the Act against the parent or the guardian?—You must do something to keep the Act alive; and I put it in force in every case, without distinction, where there is clear proof of disregard of the law, or where a fatal accident has happened; that I find it sufficient to keep the Act alive in my district. It is a practice which I have followed for many years, indeed it is a practice which I followed before we received the instructions from the Home Office on the subject; and I find that it works well, and keeps a good many managers up to their duty.

7356. Are the Committee to understand that it requires all the exertions of an energetic inspector to keep this legislation alive?—No doubt of it; no one else will do it if the inspector does not. It would fall altogether if he did not do his utmost to keep it going.

7357. Then we are to understand that the workmen take no interest in this legislation?—Very little. Perhaps the best test upon that point is this: under the present Act of Parliament, the workmen shall be supplied with a copy of the special rules, on making application for them. I have many times put the question to managers, "Have you many applications for copies of the rules"? and they say, "None, no one applies for copies; they do not want them."

7358. Then we are to understand that this employment of children under the age of 12 is rather a stock argument than a practical grievance?—I think so; I think that the Act as it now stands goes far enough, and just far enough, to do good.

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7359. Do you go to the extent of thinking that it is as valuable for a boy, under the auspices of his father, to learn that business in which he is to succeed his father, as it is for him to learn other things?—No doubt of it; perhaps more so in the case of a collier than in any other occupation, as there are many little points of danger that he has to be cautioned upon.

7360. Am I right in supposing that the constant association of children with their parents, and the constant conversation going on upon matters connected with the particular pit, has its value in the training of the boy from his earliest years?—I should think so, unquestionably.

7361. That he gets experience without knowing it, as it were, of the difficult matters in which he is to engage afterwards?—Yes, it grows up with him.

7362. And that, practically, in the way of earning a livelihood, that information is as valuable to a boy, or even more so than the knowledge of reading, writing, and arithmetic?—I do not wish to disparage the importance of reading and writing, but morals and religion are really far before that.

7363. Morals and religion they may learn, may they not, at a Sunday school, which, I presume, there is nothing to hinder them from attending?—A large number of them do attend Sunday schools; and in reference to many of the boys in my district, I find that they, not only have the certificate of ability to read and write, which is a qualification for employment without any school attendance, but they also attend school, and have monthly certificates in addition, which is not required by the Act of Parliament. That certificate (*handing in a copy of the certificate to the Committee*), if supplied to the colliery manager, is sufficient to allow of the boy being employed in the mine without any further condition being required.

7364. It acts as a recommendation for his employment?—If he is 10 years of age, and can read and write, he is allowed to work without any school attendance. In addition to the certificate of ability to read and write, some of the owners require an additional certificate of school attendance, which is really not required by the Act.

7365. Is this certificate, which you have just shown us, asked for by the owners, or is it voluntarily given by the parents?—It must be asked for by the owner, otherwise he is exposed to a penalty.

7366. No employment is given to the boy, unless he furnishes the certificate?—Just so.

7367. You told us just now, in reference to the employment of women, that you had seen nearly every woman in your district?—I have.

7368. Are you aware that one of the great complaints made against you is, that no man has ever seen you; that almost all the witnesses that have come before this Committee have told us deliberately that they have never seen the inspector, and that they do not know any other man who has seen him?—I do not know who can have stated that, because I am tolerably well known in my district. May I ask what witness it was who said that?

7369. I think I may say, without exaggeration, that every witness has given that answer to the

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Committee; almost every witness that we have examined, has given that answer; that he has never seen the inspector in the mines?—Such a thing is possible, but I do not know where such a man can have kept himself; for I have been in mines hundreds and hundreds of times, and have seen hundreds and hundreds of workmen; though I may not have seen this individual man that has been before you.

7370. If you have found, in the discharge of your duty, and in the investigation of an important question, time to visit every woman in the district, that shows, does it not, that your time is not so entirely taken up with your duties as has been represented?—I have plenty of time for the discharge of my duties.

7371. And even for the discharge of extra duties; for the investigation, for example, of a particular incidental question, such as the employment of women, which has lately arisen?—And for that also.

7372. Is the pit-bank work, of which we have heard so much, really any harder than outdoor work in a field?—It is very similar to it in character.

7373. And I presume I am right in supposing that the only reason that women have for selecting employment in the factory over employment on the pit's bank is that in the factory they work under cover, and are not so exposed to the inclemency of the weather; is that so?—I find that many of the women give a preference to the out-door work. Some of them say that they have tried to work in factories, but their health broke down, and they had to resort to out-door work; they said that they ate their meat better when they had out-door work; and I can vouch for this, they look well; they are a picture of health.

7374. Does not the whole question really very much depend upon the customs in which they have been brought up; is it not the case that the child of a factory worker follows his father's occupation in the factory, and that the child of a pitman follows his father's occupation in the pit; and is it not equally so with the wives and daughters?—Yes, that is so.

7375. Is not custom almost as strong as law, and will not that always be the case with the poorer population of this country?—I think it will be; it has been so. No doubt people get drawn off sometimes to a new occupation if there are higher wages offered; but there is always a prejudice, on the part of those who have been brought up in it, against the introduction of other people amongst them.

7376. And therefore any interference with these customs is resented by the people themselves?—Yes, to an extent quite sufficient to keep things as they are.

7377. Or at any rate, to render the practical enforcement of legislation extremely difficult?—Yes. As it is, I say we do not carry the sympathies of the public with us; and if we were to put the Act in force when no fatal accident had taken place, we should neither carry the sympathy of the public nor that of the bench of magistrates with us.

7378. Would it be looked upon as a grievance if you were to go further?—It would be looked upon by everybody that we were meddling too much.

7379. In fact, the position of the inspector is difficult as between the master and the men?—If you wish to carry the sympathy of the public and the sympathy of the magistrate with you in putting the Act in force, you have to be guided by such grounds as those which I have mentioned as regulating us; they are in accordance with our instructions from the Home Secretary.

7380. Do you find, practically, that the workmen apply to you for protection against the masters, or do they not?—They do. It works in this way: supposing there were any danger in a colliery, and that the manager were neglecting to put it right, I should say that in three cases out of four an intimation would be sent to me.

7381. By an anonymous hand, do you mean?—I very seldom receive anonymous letters; I do not like them. The intimations most frequently come from one of the delegates, but not always; and in nine cases out of ten I find that the danger is understated rather than overstated; and I can testify to this, that some of these intimations of danger, calling my attention to the particular point where the danger was to be found, have been the means of preventing some very serious accidents.

7382. Mr. *Greenall.*] Have you ever observed, in those districts where women are employed, any evidence of desire on the part of the women to be so employed. Supposing there was a vacancy, would many be desirous to fill the place?—I am told that whenever there is a vacancy for a woman at a colliery, there are three or four applications for the place.

7383. Have you ever happened to inquire whether the employment of females on the brow of collieries has had any effect on domestic wages in the neighbourhood where they are so employed?—I know this fact, that the wages of house servants have been nearly double within the last dozen years in Lancashire. That is my own experience; and then the mills are taking up so many of them that I rather think these women will, in a short time, be drawn away from the pit's bank.

7384. Is that occurring in those districts where women are employed on the pit's bank?—It has occurred very much in my district. Wherever there is a cotton mill, the women seem to disappear from the banks. It is only in Blackrod and in Welch Whittle, in my district, that there are any women left.

7385. Sir *Philip Egerton.*] How many hours in the day do the boys under 12 work in your district?—Not, perhaps, on an average, more than 10 hours; they go down about six o'clock in the morning, and you see large numbers coming out of the pit from three till six.

7386. In your district, are boys left in the mine after the miners come up?—In some cases they are.

7387. In those cases they work more than 10 hours, I presume?—In those cases perhaps they do not go down with the miners.

7388. Are you aware that the evidence which we have had before us shows that the boys are generally employed from 12 to 13 hours?—I should say that is the extreme number. It may be so in some rare cases; but it is very seldom that you find boys working from six in the morning till seven at night; and then, too, the Monday after the pay, that is to say, one Monday in the fortnight, is a slack day, if not a holiday.

7389. Do I rightly gather from your evidence that you think that 10 hours labour is not excessive for the strength of the boy?—It is hard work, but it does not appear to be excessive.

They

They work often with their parents, who take care of them.

7390. Of course those boys are precluded from attending school who are employed so many hours?—No, many of them attend evening school for three hours twice a week.

7391. Do you think that after working all day in the mine they are fit to attend school for three hours?—I would prefer to see it two hours three times a week, instead of three hours twice a week.

7392. Do you see any objection to working boys in two shifts during the day?—Yes.

7393. Will you state the objections to that plan?—In the first place you would require to send a double set of boys up and down the winding shafts, and there would be double danger in that respect. And not only that, but you must send them up and down at the time when coal is being taken up, and there is an additional danger there. Then too you have to send them not only to the bottom of the pit, but under ground, by inclined planes, and the proper waggons for sending them on might not be at hand, perhaps. In the steep mines there are proper carriages kept for the purpose. If you had to do all that twice over you would introduce an additional amount of danger. Besides that, it is not desirable in a colliery to introduce a boy into any particular place in the middle of the working time. If there is any special danger about the pit, the person who has been there all day has his attention directed to it, but a new one coming in might not be on the alert.

7394. Are all the boys employed by the miners, or are some employed by the owners?—The bulk, in Lancashire, are employed by the colliers, but some by the owners.

7395. What is the kind of work that the boys do? — Generally tramming, what they call drawing.

7396. That is very hard work, especially up inclines, is it not?—Yes, and hard work even on levels.

7397. But you are of opinion that 10 hours' labour of that description is not too much for boys of that age?—I would not interfere with the hours of labour, I think it is not desirable to do so.

7398. Mr. *Vivian.*] Is there any surplus number of boys that could be employed for a double shift in collieries?—No, as it is now there is a great lack of boys to work.

7399. Do you think that it is fair upon the coal industry to enact that boys shall not be employed under a certain age unless they can read and write, and not to enact the same thing in reference to boys in all other descriptions of labour?—Class legislation, except in the case of such dangers as colliers are exposed to, is always bad, I think.

7400. What you would propose would be that the same law which applies to collieries in respect of the education of boys should apply to the employment of boys throughout every branch of industry?—Just so.

7401. Have you found that in practice boys are employed rather in other occupations than in collieries, on account of the requirement of that certificate?—They must either be employed in other occupations or they must go idle.

7402. So that the tendency of legislation as it at present stands is to divert the labour of boys from collieries into other channels?—No doubt of it.

7403. Have complaints of that nature reached you in that district?—The law is not popular When we require boys to be discharged whom we find at work under age, it is not popular in the district to put the Act in force, though the persons may have been sinning with their eyes open, or though boys may have been killed; and I think that, without exception, the magistrates impose the lowest penalty they can. *J. Dickinson*, Esq. 29 May 1866.

7404. That is to say, the practical sense of the district revolts against the application of that legislation to collieries only?—It does.

7405. I think you have already stated that it is most desirable that a boy, who is subsequently to become a collier, should be employed as a boy, and not come into a mine at a later period of life?—It is better that he should be brought up to the colliery.

7406. Is there not great difficulty in making a grown man, or a lad of 18 or 20, into a collier?—As to thin mines, they will not go into them; but in the case of the thick mines, I do not think there is much difficulty found in getting boys after they are 12 years of age to go into them.

7407. But subsequently (we will say after 16 or 18) might there not be such a difficulty?—After a boy had been at work at any occupation up to 16 or 18, he would not like to throw away the experience he had gained, and begin a new occupation.

7408. Or is it common to meet with the case of an agricultural labourer migrating and becoming a collier?—They do occasionally; it is the exception.

7409. Are not such men employed as hitchers and banksmen, and not in cutting coal?—Yes.

7410. A great deal has been said by the delegates of miners in reference to the employment of women. Can you suggest any reason why delegates object to the employment of women; do you think that the employment of women tends in any way to keep down the price of labour of men?—No doubt of it. The delegates are exceedingly shrewd, clever fellows, those that I have met with; they are far-seeing men, and I have no doubt that they must see what must follow if women are not employed. There are 3,763 women so employed, according to the census, in this country.

7411. If the labour of those women was withdrawn from the collieries it must be replaced by that of men, must it not?—It must.

7412. And the tendency of that would be to increase the demand for men, and consequently the wages of men?—No doubt.

7413. Mr. *Kinnaird.*] Covering what area is that number of 3,763 women?—That is in England and Wales. There are 707 in Lancashire.

7414. Mr. *Liddell.*] That is taken from the occupation column, I suppose, in the census returns? — Yes. Dividing my district from Wigan and St. Helen's, I find that it gives between 60 and 70 women in my district, and I have no doubt that that is as near as possible the number that are actually engaged.

7415. Mr. *Kinnaird.*] In answer to the question just now put to you, you said you thought that the object of the delegates in giving evidence against the employment of women was that they hoped to get an increase of wages by it?—I did not quite put it in that way. I said that they were exceedingly shrewd intelligent men, and that I could not but suppose that amongst other things they saw that.

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7416. In your own district is that the case?—That will apply to my district.

7417. I think you have told us that in the whole of your district there are only about 60 or 70 women employed?—That is all that remains now.

7418. And you think that supposing these 60 or 70 women were by law prevented from being so employed, there would be a rise of wages in consequence?—In my district there are between 60 and 70, but in all Lancashire there are 707.

7419. I am confining you to your district, and you think, I understand you to say, that knocking off 60 or 70 women would raise wages?—I think it would raise wages.

7420. Very considerably?—Yes, because those women are employed in groups, as it were, where there is no cotton mill. A great number of them are employed at Black Rod.

7421. What is the number of miners in your district?—23,525.

4422. And you think that the fact of 60 or 70 women being precluded from that employment would have the effect of raising the wages?—Not over all the district.

7423. But 60 or 70 is the number of women employed in your district, and the number of miners is more than 23,000, and you believe that the fact is that if the law should prevent 60 or 70 women from working on the collieries in that immediate district the effect would be the raising of wages?—I do, because the women are employed in groups; they are nearly all in one township, the township of Black Rod, and I believe that in that township boys are scarcely to be got, and instead of talking of boys being imposed upon, they are almost the masters of the colliers in that very township.

7424. I am talking of women not of boys. You have often seen these women, I presume?—Yes.

7425. You have seen the dress they wear?—I have.

7426. And you think there is nothing at all improper in the women being employed in that kind of way?—I do not see anything improper in it.

7427. You think there is no injury to their morals in it?—I do not think there is any.

7428. And you think, do you, that in every way it is an advantage to have the women employed?—I think that if you interfere with the women being employed there, when there is no other occupation for them, you will be doing an injustice to them.

7429. You think that women can attend to those domestic duties which are the province of women equally well when they are employed on the pit bank as if they were attending to the duties which are natural and proper to women?—If you debar them from working you will debar them from many comforts which they now enjoy.

7430. In answer to a question of one of the Honourable Members of the Committee as to whether you thought that the boys never suffered from the kind of employment which they have, you said that you would not interfere by legislation in the matter. I should like to ask whether you have never known of any boys who have suffered physically from hard work in the mines?—I have never known an instance.

7431. Are you in the habit constantly of going into the mines in your district?—I am down them on the average two days a week; sometimes four or five or half a dozen days in the week; sometimes not at all; but, on the average, since I have been an inspector, I have been down about twice a week.

7432. And you have never had a case brought to your notice of injury to the boys from over work in the mines?—I have no recollection of it. I have a great number of complaints; complaints as to danger reach me from a dozen to twenty times in a year; there is scarcely a month in the year without some complaint as to danger, but I do not remember a single complaint as to boys being injured by over work.

7433. You object to all restrictions in regard to mines; is that so?—I say that the restrictions, as far as they go, produce a good effect, but I say let them go no further. The workpeople do not sympathise with them and follow them up.

7434. Then I understand you to say that the restrictions, as far as they have gone, have done good?—Yes, I think they have, but I think they are not an unmixed good.

7435. *Chairman.*] I understood you to say that, as a rule, the women that are employed are not married women?—The great bulk of them are not married women, there are some widows amongst them.

7436. But, as a rule, the married women with children stay at home in the coal districts as in other districts?—Where the husbands have enough to keep them.

7437. I understood you also to say that you would rather shorten the boys' schooling than the hours of their work?—I said that I would much rather see two hours' attendance at school on three days, than three hours on two days; I think that three hours at school is too much for a boy that has been at work all day.

7438. Have you got your instructions from the Home Office?—Yes (*handing in the same*). This (*producing it*) is a supplementary instruction.

7439. Do you feel it your duty to visit mines without being summoned, in consequence of any accident, or from any complaint?—We do not.

7440. It is not your practice then to go, of your own accord, into a mine without a special reason?—It is not.

7441. But you say that there is hardly a week that you are not in a mine two days?—There are always a number of accidents taking place, and when an accident takes place it must be reported to us and to the Secretary of State.

7442. Whenever you do go down it is upon some complaint, or from special cause?—Generally; almost invariably.

7443. Do you ever go spontaneously?—Yes; if I have reason to suppose that there is anything wrong I go.

7444. What reason should you have to suppose that there is anything wrong, except from a complaint or a communication?—One may know the character of the manager, or one may have some information to lead to suspicion.

7445. Have you any reason to know that, in some cases, the workmen shrink from complaining to the inspector?—Yes; I think that in addition to those cases where they do send information to him, there are other cases where they might advantageously do it.

7446. But those cases, where there is reason to suspect that something is wrong, you visit the mines of your own accord?—Yes, we have power to

to do it; but it is necessary to bear in mind the extent of the district, and I have stated in my published views as to the scope of inspection that I do not think it desirable for inspectors to act as viewers.

7447. Was it always understood that the inspectors were to wait until called upon before they went into a mine?—I think some of the public do not understand it in that light; they seem to think that the inspector could be omnipresent, whereas the mines are so extensive that if any inspector, or any 12 inspectors, were to attempt in my district to visit every working place they could not do it; they never could get into them.

7448. Are you acquainted with the practice of inspectors of factories; do they inspect the factories without being called upon?—I believe that in a great number of cases they are moved by something to make an inspection; there is some intimation sent to them; I understand that to be the case. After careful consideration I have stated in my report to the Secretary of State my deliberate conviction as to the scope of inspection, and I believe that if you were to go further than that you would be doing a positive mischief; you had better repeal the Inspection Act altogether if you go further than that.

7449. Mr. *Liddell.*] Do not you think that it is safer to leave the responsibility of the management of mines to rest, in fact, on the shoulders of those engaged in working the mines than to attempt to take it off those shoulders and put it on the shoulders of somebody else?—No doubt about it; I have worked through all the different Inspection Acts, and I have seen how the thing works, not only in my district but in other districts, and that is my deliberate conviction that if you were to attempt to go further than is now reached by the inspection, you would do more good by repealing the Inspection Act altogether, and leaving the managers responsible as before.

7450. I will ask this further question, which you can answer, or not, as you please; do you think that your district is of such an extent that you can adequately perform the whole of the duties which you are called upon to perform?—I believe that the district is not too large for me, and that I do discharge the duties as they should be discharged. I get the name of being a strict inspector in my district, and am looked upon as such, perhaps; but the regulations that are in the Act of Parliament I put in force, and they are well carried out. It is no use having a lot of statutes in the statute book if they are not carried out, and I find that it is difficult enough now to get people to carry out those that there are.

7451. The meaning of being a strict inspector is, being an inspector who sees that the law is carried out, I presume?—I do not allow them to slur the Act.

7452. Consequently, if too much work were required of you, you could not be a strict inspector, strictly speaking?—Certainly not; many of the collieries have such extensive underground workings, that if you attempted to penetrate every spot by your own knowledge, you would most assuredly fail, and do more harm than good, because they would wait for your coming.

7453. *Chairman.*] You adhere still, I understand you, to the views on inspection expressed in your report?—I adhere to it all now, and it is the result of 15 years' experience of the Inspection Act.

7454. Mr. *Greenall.*] What is the date of that report?—This is the last published report (the reports for 1865 are not yet out); this is in the report for 1864): "In my reports for the years 1858 and 1862, and also at other times, I have gone into the subject, and shown the real scope of the Government inspection of mines. I now find, in an increasing number of instances, that the miners avail themselves of the means within their reach of having danger removed by giving me information of it, by which, in all probability, accidents are being avoided. Having now had more years of experience, I may repeat what I have said, to the effect that it is not intended, nor is it desirable, that the inspectors should act as the viewers or managers of the collieries, but to be in the districts that matters may be referred to them; that in case of complaint or reason to suspect danger, the pits may be inspected, and the requisite steps taken to remedy it without an accident occurring; and that when any accident has occurred, which appears to require it, investigation may be made in order to ascertain whether the provisions of the law have been complied with, and that, if necessary, the penalties for neglect may be proceeded for. It is apparent that when accidents have occurred, investigations press the responsibility of the management upon the only parties to whom it attaches, and are the means of causing precautions to be taken which are likely to prevent recurrence of accidents. Mines continually require attention. New roads are daily being made as the coal is worked, requiring renewed propping and frequent changes in the ventilating arrangements, and the ventilating power must be regularly kept up; wear and tear also are constantly going on of the ropes, steam boilers, machinery, pit shafts, &c. If the view taken by some parties, therefore, that inspection should reach further than this were acted upon, it would tend to relieve the owners and managers of mines of the responsibility which now devolves upon them, and to throw it upon the Government, which, unless the inspectors were made as numerous as the managers, and had an equally numerous staff, with power of control over the expenditure, they could not possibly undertake."

7455. Mr. *Liddell.*] As a matter of practice when a complaint is addressed to you from the miners which you consider to have the stamp of authenticity upon its face, do you invariably make a point of attending to it?—Invariably, certainly; if I did not I should consider that I had got the responsibility upon myself.

7456. Do many of those complaints reach you?—I should say on an average from 12 to 20 in a year.

7457. Mr. *Greenall.*] Have you known an instance in which a collier has given you that kind of intimation to visit the colliery where the man has suffered for it and lost his employment?—No, I could not quote an instance, but the men are very much afraid that they would be discharged if it were known, and I always take as much care as I possibly can not to let the managers know in what way I have got the information.

7458. You have never known a man discharged however, from that cause?—No; I have heard it spoken of, and I have heard it threatened that men would be discharged for it, and I have said, "Well, if any man is discharged for such a circumstance as that I shall certainly make it my

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business to report it to the Secretary of State, and it will appear in my report."

7459. You have never had occasion to do that?—Never once.

7460. Mr. *Liddell.*] Have you found in most cases when complaints have been addressed to you, that those complaints have been well founded?—They have generally been understated rather than overstated, and that is the way in which, I think, the Act should work. If you were to go to a well-appointed colliery which had everything complete, and to attempt to do that which on an average would take you a fortnight, namely, to make a thorough inspection of that colliery, I think a manager who attends properly to his duty would think you might be better employed.

7461. Mr. *Greenall.*] Do you find that the managers of collieries give you every facility to enable you to make an inspection?—Yes, they are bound under the Act to do so, and they do so.

7462. Mr. *Liddell.*] Have you found occasionally when you have been unable, from other avocations, to attend at once to an application to visit a mine, that in the interval between the application being made to you and your visit the evil has been remedied, and the house has been, if one may use the phrase, put in order?—Supposing that a complaint reached me while I am here in London, and that it appeared to be a matter that might involve loss of life or limb, I would at once write to the owner of that colliery, stating that I understood that such and such a thing was wrong in his colliery, and that I must request his attention to such and such a rule, or portion of the Act referring to that, reminding him of his duty therein; for instance, if it were in reference to ventilation, calling his attention to his duty under the first general rule, and intimating that I would take an early opportunity of making an inspection. That at once calls the owner's attention to the matter, and if he did put it right it is only what he should do; it is his duty to do it.

7463. Then it is your practice, is it, upon receiving a complaint, to address the owner at once?—No; if I received a complaint and were at home, and had no other more pressing engagement on hand, I would go off that morning and make an inspection.

7464. Sir *Philip Egerton.*] I suppose when you go under ground, you are dressed in an ordinary miner's dress?—Generally; sometimes we go down just as we are when things turn up suddenly.

7465. If you were dressed in an ordinary miner's dress, it is possible, is it not, that you might go down without all the miners recognising you as the inspector?—So many hundreds of the miners know me in my district, that I hardly know who it could be that could make such a statement as that he had never seen me in the mines. I think there must be some mistake.

7466. When you were visiting one part of a mine, the miners in the other part might not know that you were there?—When we go to a mine we have to be very careful what we meddle with. The ventilation of a mine is pretty much as complicated as the sewerage of a large town, and you must be very careful how you interfere with it.

7467. I wish to account for the miners giving us evidence to the effect that they are not aware of the inspectors visiting the mines. It is possible that you might be in a mine without the miners knowing it?—It is possible that we might be in a mine without seeing half a dozen of the miners, and yet we might have done all the good that we should have done if we had stayed longer; but I never put myself before the miners, and I never care whether they see me or not. I am quite satisfied that the Act is working well.

7468. General *Dunne.*] With the present inspection of mines, is it possible for a mine to remain for some years without any inspection at all?—A mine would not go altogether unvisited; besides the master must have got rules established when he has commenced a pit.

7469. How would that affect the master; is he bound to give any notice?—He is bound to give us notice that he commences a new pit.

7470. But in an old pit what would the case be?—In an old pit, if he has neglected to get rules established and it came to our knowledge that there was such a colliery in the district, we would make it our duty to call and see how it was that he had not got rules established.

7471. Would it be possible that under the present system, apart from the question of the master of the colliery complying or not complying with the rules, that the pit could exist without being inspected for several years?—No doubt about it; and I am not quite sure whether the inspector, in case of any accident happening in that pit, would not come more disinterestedly to the investigation than if he had been implicated by any part that he had taken before.

7472. If an accident occurred in any pit, what would be the greatest space of time that would elapse between the accident and the investigation of it?—The shortest time has been when the investigation has taken place the same day; sometimes it is the next day, sometimes the day after; as soon as conveniently can.

7473. Would it, without attributing neglect to the inspector, sometimes happen that a week would elapse?—Yes.

7474. Would not it be possible to change the whole appearance of the place in that time; in fact, would not natural causes effect such a change?—Yes, but we are practical men, and this change could not have been made in a mine without our seeing it and asking for an explanation as to the altered circumstances.

7475. In fact, the appearance of the place would lead a practical inspector to see the change and would excite more suspicion?—No doubt of it. There is, as a rule, no attempt made at concealment with us. I think they pay us that compliment to know that if they did attempt concealment we should unravel it, but they do not attempt it.

7476. Do you think that the number of inspectors now is sufficient for all practical purposes, or do you think that sub-inspectors and assistants are required?—I think that at present the inspectors are sufficient in number for all practical purposes.

7477. All the purposes contemplated by the Act?—All the purposes contemplated by the Act, or which it is desirable should be under inspection.

7478. I understand you to say that the ventilation is a matter to be left, except in case of accident, to the managers of the mines, and that it is desirable for it to be left to them?—It must be.

7479. You

7479. You could never have a system of inspection to reach that, you think?—Never. As it is now you might inspect a pit and the neglect of a brattice, or leaving open a door, might cause an accident immediately after.

7480. Therefore, legislative interference on that point would relieve the manager from responsibility, and act injuriously in that way, you think?—I am quite satisfied that it would, and that you had better repeal the Act altogether than attempt to throw the responsibility on the inspectors.

7481. In case of an accident which happened from want of ventilation or from some other neglect on the part of the proprietor, would the inspector be entitled to report on that?—Yes.

7482. That would form the ground of his report, would it not?—Perhaps it would be well that I should read a paragraph from our instructions. This is what I have practised for years before this instruction was ever issued. The instruction itself is only dated the 16th of February 1865, but this has been my practice for a number of years past, and I find that it works well: "I am to take this opportunity of requesting that you will promptly communicate to the Secretary of State full information with respect to all occurrences of importance in relation to your duties, and, especially that, first, if a fatal accident occurs in your district, which, after inspection of the colliery, appears to you to have been caused by a violation of the provisions of the law, you will make a report of the facts to the Secretary of State, accompanied by a statement of your opinion as to the propriety of instituting a prosecution against the owner or manager, or other person connected with the colliery; and that, secondly, if after the inspection of a colliery, you have pointed out the existence of dangers or serious defects to the owner or agent, and you find upon a subsequent inspection that sufficient remedies have not been applied, you will report to the Secretary of State, as provided by the Act."

7483. What would be the consequence of such a report as that being made?—I invariably find that if I send such a report as that to the Secretary of State the answer is that I am to take proceedings for the penalty. The Secretary of State will not himself bear the responsibility; he always with me puts it upon the inspector to carry out the Act.

7484. Therefore there would be included in a definition of the things required by the Act a prosecution in case of such a violation of the law?—If I feel the slightest doubt as to a case being perfectly clear I never recommend a prosecution.

7485. Is the Act sufficiently clear itself on that point?—You would have to satisfy the justices that the Act had been infringed.

7486. Do you find that the justices very often do not convict when you prosecute?—I find that perhaps on the average in one case out of 10 they do not.

7487. You go very cautiously to work?—I do; if I have the slightest doubt, I do not take it before them.

7488. Do you think that the Act goes far enough on that point?—Yes, I do; I may mention that I publish in my report a list of the penalties that have been imposed in each year.

7489. Mr. *Vivian.*] Do you ever make practical suggestions as to the working of the collieries?—Very largely.

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7490. Supposing that the owner and yourself disagree upon a point which you may suggest, what happens then?—There is a power of arbitration under the Act; but that is a power which we certainly would not like to resort to. In the first place, it is a one-sided arbitration.

7491. Have you ever had a case of that kind where arbitration was resorted to?—Never; I have given notices where, after discussion, we have not been able to agree upon a point, but that has only been on very few occasions, and on the notice being given, the colliery owner has given way, and has not gone to arbitration.

7492. Why would the arbitration be one-sided in such a case?—Because the colliery owner, in the first place, has to nominate the five persons from whom the arbitrators are to be chosen; but the inspector would only resort to that kind of arbitration to relieve himself of responsibility.

7493. We will suppose the case of the suggestion which you had made being adopted, and an accident ensuing from such suggestion, would not that place you in a very awkward position?—It really might, and amongst the hundreds, I may say the thousands of suggestions that I have made, I have many times thought that it would be unpleasant to me if anything of the kind did happen; but I am happy to say that, hitherto, it has not; of course we are merely human beings, and may make mistakes, and anything might happen.

7494. *Chairman.*] Did I rightly understand you to say that you did not receive above 10 or 12 complaints in the year?—From a dozen to 20, I should say, on the average.

7495. What are the other causes besides complaints that take you down the mines; for I understood you to say that you went down twice every week?—It is stated in the report "when any accident has occurred, which appears to require it, investigation may be made in order to ascertain whether the provisions of the law have been complied with, and that, if necessary, the penalties for neglect may be proceeded for."

7496. You say that on an average you go down something like 100 times a year, or twice a week?—Something like that.

7497. And you have said that you have not above 12 or 20 complaints in the year?—Just so.

7498. What, then, are the other causes that take you down into a pit?—When an accident happens, that appears to require it, I go down. There are about 60 fatal accidents every year in my district; and, besides those fatal accidents, there are a large number of non-fatal accidents that require investigation.

7499. Then it is either complaints or accidents that take you down?—Yes; sometimes we go down without that, if we have reason to suspect anything wrong.

7500. Under complaints, do you include anonymous communications?—Yes; I would not neglect anonymous communications, though I do not like them.

7501. Referring to the first of the general rules as to ventilation, should you say that that is generally reasonably complied with in your district?—Yes, I should say that it is reasonably complied with.

7502. And that the suggestions which you have made with reference to better ventilation

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have been generally attended to?—They have been to a great extent. There are, however, constantly cases cropping up that show that the Act is not complied with; and we have to bring the penalties to bear in reference to the worst cases, and to make representations in reference to those which are not so bad.

7503. You would refer the Committee to the report for the causes in which you have enforced the penalty?—Yes, there is scarcely a year in which I have not had to enforce the penalty under the first general rule.

7504. You said, did you not, that there was an unwillingness generally on the part of the magistrates to enforce the law as to the employment of boys?—They almost invariably impose the lowest penalty.

7505. Do you find any similar feeling as to enforcing the law with regard to ventilation?—No, but they do not generally impose the maximum penalty of 20*l.*

7506. Have the penalties generally been such as have appeared to you sufficient to meet the justice of the case?—As a rule they have.

7507. You are aware, perhaps, that several of the workmen complain of the use of the words "under ordinary circumstances" in that general rule, and that they would wish to have a rule enforcing ventilation under all circumstances?—The words "under ordinary circumstances" were not in the rule as it was recommended by the inspectors to the Secretary of State; but the coal owners have to be looked at as well as the workers, and whether it would be fair to them to exclude those words is a question. In practice we do find that it is a difficulty, and before you can get a conviction you have to show that the ventilation was defective "under ordinary circumstances."

7508. Then those words create some difficulty in obtaining a conviction?—No doubt of it; but I am not prepared to say, looking at both sides of the question, that that is not a proper difficulty. There are many colliery owners who decline to take advantage of it, but I do meet with cases where the most powerful advocacy is brought to bear to upset the case on that point; and occasionally it is successful, where the justice of the case is, no doubt, on the other side.

7509. Injustice, then, has been done in the way of acquittal upon the strength of those words?—I have thought so, but I only lose about one case in ten myself.

7510. Perhaps you abstain from bringing cases before magistrates, on account of the difficulty which those words put in your way?—I think that if I were to bring more cases before them than I do, I should not carry the sympathy of the public with me.

7511. But if it were not for those words you would bring more cases before them, would you not?—No, I do not think so.

7512. Do you conceive, taking the words of that rule, "render harmless noxious gases," that "harmless" there has merely reference to the danger that may arise from explosion, or that it also has reference to the bad effects of other gases (not explosive) upon the health of the miners?—I have no doubt in my own mind that it comprises all kinds of gas; and I take proceedings, whether the infringement of the Act is as to fire-damp or as to black-damp. Last year I had proceedings taken against one owner of collieries, in a case where no accident had happened. Complaint was sent to me, and I went to see him once or twice; but he disregarded what I said. That was a case of black-damp. I took proceedings, and the penalty of 10*l.* was imposed for injury to the health of the workmen.

7513. Then there is no doubt that that clause does apply to black-damp as well as to fire-damp?—There is no doubt of it.

7514. You have found no difficulty in enforcing the law in that respect?—I have succeeded on different occasions in enforcing it on that very point, and so late as last year.

7515. But there would be a great difficulty, would there not, in ascertaining what amount of ventilation would make wholesome the air of a mine which was liable to black-damp?—It just occurred to me that that point might be raised by the coal owner; and he certainly did leave no stone unturned to get rid of his responsibility, under those words, "ordinary circumstances." He also endeavoured to show that the circumstances were not ordinary, because a fall of roof had taken place when I was in the pit that morning, and that that was the cause of the black-damp being in the working places. But the magistrates, seeing that I had two or three times pointed out this black-damp, and called his attention to it previously, did not go with him; they considered that he had been neglecting the requirements of the Act, "under ordinary circumstances." In order to show that it was injurious to health, I called in a very experienced chemist, Dr. Angus Smith, to state the quantities of carbonic acid gas that were injurious to health, and he told the justices that "when there is from two to two and a-half per cent. of carbonic acid gas present, the proportion depending somewhat upon temperature, moisture, &c., candles are extinguished, and that so small a proportion as one-fourth per cent. is sufficient to make a workshop be considered close. It is not known exactly how much will suffocate a man, but few people could bear four per cent. long, and it is believed that it would be rapidly fatal to some. When candles go out it is a plain warning that a man would not last long; and to be harmless there should not be so much carbonic acid in the air of any mine as to dim the burning of a candle."

7516. Should you say, according to that test, that if the candle would not burn unless it was put horizontally, the air in that mine was not in a wholesome state?—If a candle would not burn standing straight up I should say that it was decidedly unfit for people to work in.

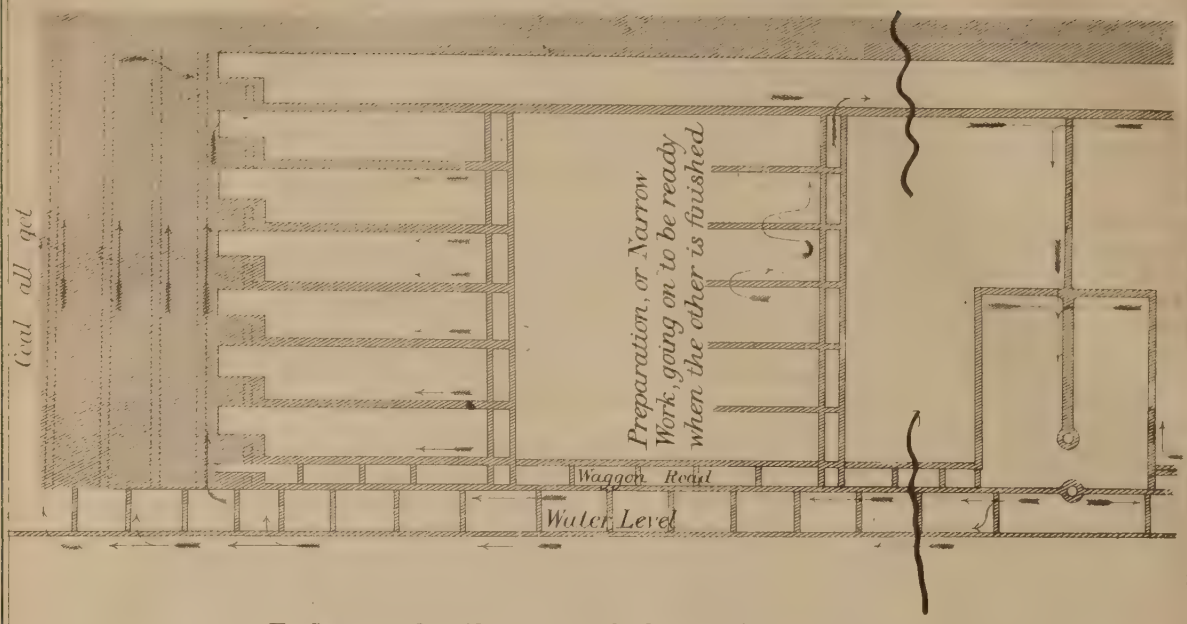
7517. Are you aware that it is alleged that in many of these mines the candles are put in a horizontal position?—If it were brought under my notice that any collieries in my district were being so worked, and they did not promptly put themselves right, I should cause proceedings to be taken against them, as I did in this instance, which I have mentioned.

7518. Was that test, which was laid down by Dr. Angus Smith, assented to by the magistrate?—Yes; Dr. Angus Smith gave the quantities, though we know in practice that with carbonic acid gas the candle goes out before life fails.

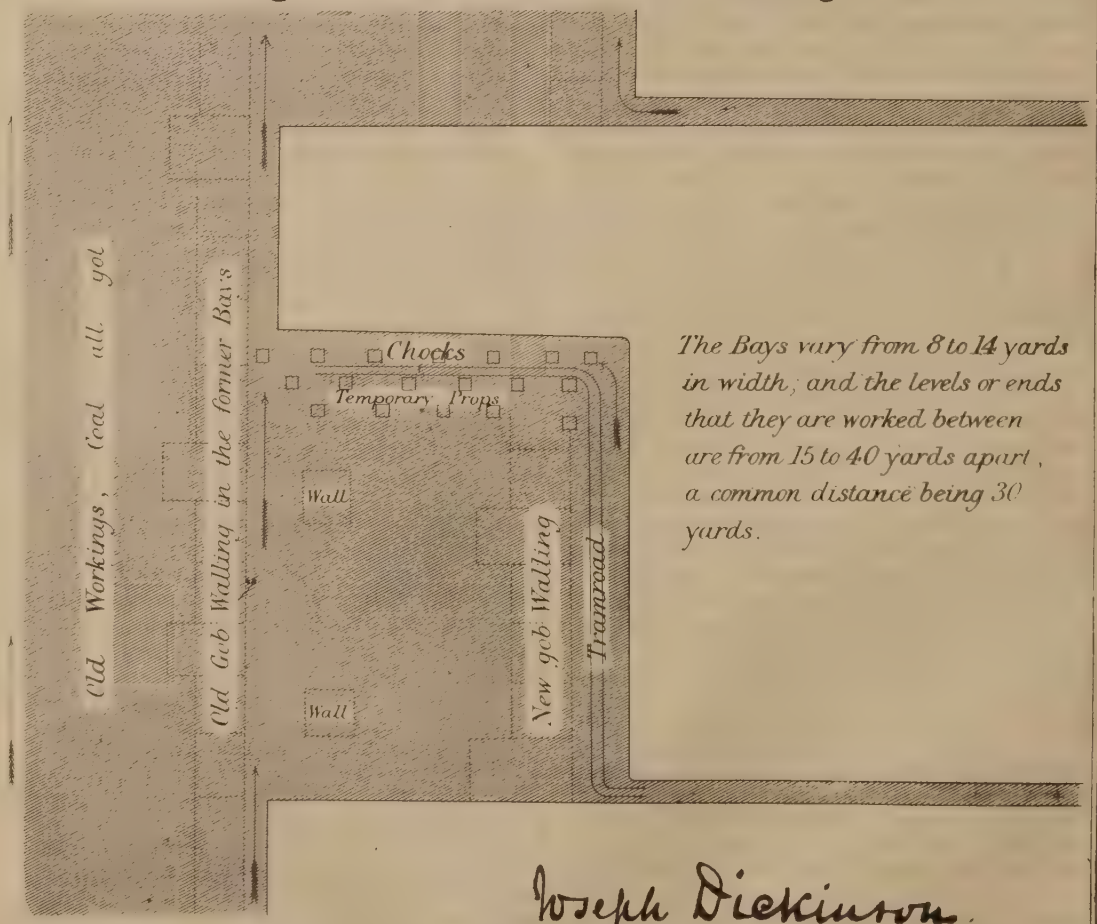
7519. Upon what points have your suggestions, as to deficient ventilation, been chiefly made?—One of the greatest improvements made in the ventilation in my district has been the extension of the improved system of getting coals

(*the*

Sketch showing the System of getting Coal by Bays in the Manchester District.



Enlarged Sketch of One of the Bays Showing the Chocks and Gob Walling.



The Bays vary from 8 to 14 yards in width; and the levels or ends that they are worked between are from 15 to 40 yards apart, a common distance being 30 yards.

The Chocks are usually built of Hard Wood, 2 ft. long by 6 inches square.

Joseph Dickinson.
Inspector of Coal Mines
May 1866

(*the Witness handed in the following explanatory sketch*): "Many years ago, when Wigan was part of my district, a very serious accident happened in the Ince Hall Colliery there, and I pointed out to the jury that under such a system of getting coal, as was in vogue there, so many workings being opened out at one time, and in such a fiery mine, I did not think that the manager could possibly keep all right; but that the least accident, perhaps, to an air-door or anything of that sort, would upset the arrangement, and that they ought to get a better system of mining introduced. Shortly after that this matter was brought before a Committee of the House of Commons sitting on coal mines. The late Mr. Nicholas Wood was then one of the leading colliery viewers; he stated to the Committee that I was exceeding my duty in interfering in any way with the mode in which a colliery was worked; but I held that so long as I confined myself to the questions which had reference to danger, whilst the system of working was one which was likely to bring on an explosion, it was within the scope of the Act, and I have continued to impress upon people, where I have seen them working on a bad system, the necessity of improving the system of working. There are many mines which are worked on such a system, that if they had a saint from Heaven to manage them he could not keep them safe. There are some mines of which I would not take the management on any conditions.

7520. Would the alteration which you suggest involve any great change in the system of mines?—Yes, it must be done gradually. You must introduce it, and make the change as the mine admits of it.

7521. Without going at present into the details of it, what were the main features of your system?—The main features were keeping the workings in such a way and keeping the buildings called gob walling so arranged, that the air of the mine should be thrown back into the old workings, and keeping the gas from getting near the working places.

7522. Does your principle involve keeping fewer ways open?—First driving out the levels to the far end, to some extent, which you can begin to work back upon, and then to begin and work back from the far end by a series of bays or stalls, taking all the coal away in each working, as is shown here (*pointing to the sketch*); and in each working having a building or a gob wall which keeps the roof from falling in, and keeps the gas from the working face.

7523. Mr. *Liddell.*] What is that system technically called?—It is a combination of pillar and stall, and long work.

7524. *Chairman.*] Bringing it all back with you?—Yes. By this means there is scarcely any appreciable amount of coal lost, whereas by many of the systems in which coal is got in this country they lose half of it.

7525. Do you conceive that under the Act a coal owner is bound to adopt that improved mode of working, and that he is answerable for accidents that might arise from not doing so?—No, it only comes under the Act so far as the system in use may be unnecessarily dangerous.

7526. I suppose it is under that clause as to arbitration; it is under the clause which gives you the power of making suggestions as to the want of proper precautions?—Yes; we could arbitrate, but it is not a thing that I would arbitrate.

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7527. A great deal has been said by the workmen whom we have had before us about the importance of keeping open the workings which are temporarily disused, and keeping the current of air into them, because we have heard that there are workings which are closed, and perhaps only imperfectly closed?—That is the second general rule.

7528. Instead of the second general rule, they would have it provided that those places should not be fenced off, but that they should be left open, and a current of air carried up and down them. There has been a very general expression of opinion among the workmen upon that point?—That second general rule, as I find it in practice, is not one of unmixed good; it has many good points about it, and it has some bad ones. I find that some colliery owners do endeavour to shelter themselves under that rule, instead of doing their duty under the first general rule. They seem to say that it ceases to be a working place directly it is fenced off, and that they have done all that is required under the Act of Parliament. Where the colliery owner takes that view, the rule is pernicious; but, on the other hand, where a colliery owner, with the best intentions, had accidentally one working place in the pit stopped by fall of roof, or from some unexpected cause, during the day, if he neglected to fence that off until he could get time to ventilate it, that would be a cause of danger to anyone walking inadvertently into it. The rule is not all good, and not all bad; I think that the balance as regards that rule is in favour of the rule standing, but not very largely so.

7529. Notwithstanding that, you would, I suppose, modify that rule, and provide that he should fence off that place for a time, till he could make arrangements for carrying the air into it?—That is the intention of the rule.

7530. Do you assent, then, to the suggestions that have been made by the workmen, to the effect that it would be better that the places which are not permanently disused should still have the current of air passing around them?—Yes. The law upon that first general rule is this: that the ventilation must be kept up in every working place and travelling road constantly, not only during working hours, but during Sundays and other days (that is the decision of the Queen's Bench); and that a temporary stoppage does not bring a pit or a working place out from under the requirements of that first general rule, but the ventilation must be constant; and if a colliery owner neglects to ventilate any place which could be ventilated, I think he would be still liable under the first general rule.

7531. Then assuming that the second rule would justify a coal owner in not fencing off a working not permanently disused, you think it would be an objectionable rule?—I say it is not one of unmixed good; but I think that the value of that rule is such that there is a preponderance in favour of retaining that rule in the Act over discarding it; it prevents more explosions than it causes.

7532. To return to the question as to the first general rule, in answer to my question about the nature of the suggestions which you make (apart, I mean, from the fact that you have suggested a better mode of working), you said that you had

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to point out defects in the nature of the air-ways, or defects in the bratticing, I think?—Over and over again; I am continually talking and recommending.

7533. Or you have had to point out the want of sufficient doorways?—Constantly.

7534. Have you found your complaints generally attended to?—Almost invariably.

7535. And readily?—And readily. I tell the person that I require the Act to be carried out strictly, and I have a little conversation with him about it. I say that he has the Act and the rules for his guidance, and that he must bring proper skill and care to the matter, and that I shall hold him responsible; and I say, "If there is anything that you have any difficulty about, do not hesitate to put yourself in communication with me, and I will spare no trouble."

7536. What have the complaints that have taken you down the mine generally referred to?—I should say to everything, in fact, under the Act.

7537. More to ventilation than anything else?—I do not think there is one point more than another.

7538. Are there a good many mines in your district that you have never been into, do you suppose?—No, I do not think there are many.

7539. There may be some?—Yes, there may be some, but I think I have been in most of them; indeed I like to get a little knowledge of each mine.

7540. Mr. *Fawcett.*] If, as you say, working upon a bad system very often wastes half the coal, and if the improved system which you suggest would be so much more economical, why is it not introduced; is it from prejudice?—When a person has got his colliery set to work on a bad system, he perhaps does not know any better, and he thinks he is right; and, besides, it is a very difficult matter to alter the system of a district, much more difficult than a person would imagine who has not tried it. The workmen themselves do not like changing systems. There is a very strong prejudice to overcome, not only on the part of masters but on the part of workmen; and, besides, it very often happens that the system followed in the district is the best system, one which has been arrived at by a large number of years' experience.

7541. Mr. *Liddell.*] I hope you will excuse my asking the question, as I do not ask it in an invidious sense. Will you tell the Committee what profession you were brought up to?—I was articled to be a mining engineer and surveyor in Newcastle-on-Tyne, and I have followed the occupation all my life.

7542. You were bred, in fact, I may say, as a mining engineer?—As a civil and mining engineer.

7543. May I ask whether the Government, in the appointment of inspectors, take care that a man has always had a practical education of that description?—Looking at the appointments that have been made, I think that cannot be doubted.

7544. I presume that, unless a man had been brought up to the profession he would find himself very awkwardly situated in being brought in contact with experienced persons, and often having to contest their opinions?—No doubt about it. He has to act alone very often. When an inquiry is going on he has to act alone, with the combined talent of the district against him.

7545. And unless he can hold his own against these experienced men, he will very soon, I suppose, be voted a humbug, and be found out?—No doubt of it.

7546. Then it requires no small amount of practical experience to qualify a man to act as inspector at all?—No doubt an inspector must be well up in his profession, and know what he is about, if he is to be of much use.

7547. When you went into Lancashire, you found a system of working mines in vogue there which you thought neither safe nor satisfactory in any way, and you set about correcting it, as I understand you?—No, not at first; under the 13 & 14 Vict. c. 100 (that was the first Act) we had so little power that it was little more than an act of inquiry; and that time was perhaps wisely used in seeing really what were the defects of colliery management; and then, in the Act of the 18 & 19 Vict. c. 108, which followed, and next in the present Act, those improvements have been introduced which experience in the working of the Act suggested.

7548. But you have told us, have you not, that you have been instrumental in inducing the managers of mines to adopt a safer and better mode of working collieries in your district?—No doubt of it.

7549. Did you find a great deal of difficulty at first in the way of getting those improvements adopted?—Great difficulty.

7550. You had prejudice to contend against?—Very great prejudice.

7551. And you had that which we have already talked of, custom?—There were great difficulties to contend against on the part of colliery owners and colliery managers. I was thought to be too strict, and considered to be exceeding the powers of the Act of Parliament; when, on the other hand, I was only letting them know their responsibilities. Now, however, they know them pretty well in my district, and we sail along as comfortably as possible. I think they all know that, under the circumstances which I have explained, if they are found infringing the Act of Parliament, it will be brought to bear upon them; and I believe that the workmen, too, have confidence that the Act will be administered.

7552. You said, in one of your answers, that some mines were so worked that you would not take the management of them on any account; did you mean by that, the inspection of them or the management of them as a viewer?—The management of them as a viewer.

7553. Supposing that you found a manager working a colliery in a way which you considered bad, what steps should you take?—If I found that he was infringing the Act, as regards ventilation, I would put the Act in force; but if it were only a question of the system of management, I would talk to him and reason with him.

7554. Do you find that in most cases that prevails?—I find that the improvements do make way.

7555. Supposing a mine to be so worked that you would not take its management as a viewer, but you were compelled to visit it as an inspector, and that an accident occurred, and an action was brought by the relatives, and it was clearly shown before the jury that that mine had been worked on a system which you did not approve of, and that your advice had not been followed; would

would that fact have a great effect in court as telling against the managers of that mine?—It might, but it is very difficult to bring home any direct evidence upon a system of working. What one would say was a bad system, you would get 50 to come and pronounce the best system that could be adopted under the circumstances. You would have no difficulty in finding any number of mining engineers to come and say that it was the best system that you could adopt; I should say that it is a matter of opinion.

7556. Is it matter upon which an ordinary jury would find themselves incompetent to decide?—I do not think that the colliers now, as they are advised, would take a proceeding for compensation under such circumstances. They are exceedingly careful not to take any proceeding in which an adverse decision would be given against them, and they are only proceeding on cases in which there has been a clear violation of the Act of Parliament. In my own district, at the last Liverpool assizes, I was summoned as a witness in regard to one claim for compensation. A person had been killed in the colliery, and I had had the penalty imposed for non-compliance with the Act of Parliament, and, with the consent of the Secretary of State, that penalty was given to the widow. The widow then took proceedings at Liverpool, and she was awarded 300 *l.* for compensation.

7557. These cases unfortunately often arise; is compensation generally obtained when they do occur?—With the new light that is coming in now, it seems likely to become general.

7558. What do you mean by "the new light"?—The colliers of England have very seldom resorted to that. In Scotland they have practised it for many years; but in England they have not done it, perhaps because there has been a good understanding between the masters and the men, and the masters have helped the men.

7559. Such proceedings are instituted, I presume, under Lord Campbell's Act?—Yes.

7560. You say, as I gather, that it is only now beginning to be general in England?—Yes.

7561. Have you any reason to suppose that it will go on?—I have; because if any accident happens in my district, and it is supposed that I might think it a case in which I should not attend, I am specially asked to attend the inquest, if they think the Act of Parliament has not been complied with.

7562. If an accident were shown to have occurred from resorting to a system of management which the inspector had condemned, surely that would tell very strongly against the managers of that mine, would it not?—They would qualify the inspector's opinion by bringing some other very eminent mining engineers, and men of great repute as colliery viewers on the other side, and I do not think that the men, as they are advised, would bring a claim for compensation based upon such a ground that the decision might be upon a matter of opinion.

7563. Still, if compensation can be obtained upon proof being given that the accident is owing to the fault of the owner or manager of the mine, the mere payment of that compensation may involve their absolute ruin if the accident is an extensive one, may it not?—It might.

7564. Take the case of the loss of 50 or 60 lives, which unhappily is not an uncommon occurrence, an action, under Lord Campbell's statute, might involve, might it not, the entire ruin of those owners and managers?—From what I know of the miners of my district I can see that there is now a strong feeling among them to watch every case for compensation in which there has been a clear violation of the Act of Parliament, and to which the men have not contributed: and I also know that they will not take proceedings if there is anything doubtful. When I say I know it I may explain that when the lawyers, who are employed by the men in such cases, Messrs. Shaen & Roscoe, of Bedford-square, called upon me to say that they would require me to go to the assizes upon this point, I said, "I have already exhausted the Act; I have brought the penalties to bear, and I have no more to do with it." They said, "Well, we shall subpœna you to give the same evidence as you have given previously;" and I said, "Well, in that case, I shall go." They stated then that they did not entertain any doubt about it. They are very much afraid of an adverse decision, and I believe no case would be taken up except on a clear violation of the Act.

7565. And in the event of its having been a clear violation of the Act, it is perfectly right and proper, is it not, that the owners and managers should bear all the responsibility attaching to such violation?—No doubt; I think that the widow was justly entitled to her 300 *l.*

7566. In bringing a case at the ordinary petty sessions before the magistrates, supposing you fail in establishing your point, you have to pay costs, I suppose?—Certainly.

7567. Has it ever occurred to you to have to pay costs?—Certainly. Although I never take a case if I can see any doubt, I lose about one case in ten.

7568. But in the event of your having to pay costs, do you again refer to your friend the Secretary of State?—Yes.

7569. And does he take that responsibility which he is so fond of putting on your shoulders, and pay the costs?—Yes, we never take proceedings without his sanction, and then we have the costs paid by the Home Office.

7570. I thought you said that there was a great reluctance upon the part of the Home Office to take proceedings that could be put upon the inspectors?—No, I think I must have been misunderstood; they require inspectors to report any irregularity of consequence to the Home Office, and to give an opinion upon it, and if you state that you think it is an infringement of the Act, then they never keep the responsibility, but they refer it back to you.

7571. That is to say, they like to leave these matters to the discretion of the inspector on the spot?—To that extent. They require him to report to them under certain circumstances. If the accident has been caused by a violation of the provisions of the law, or if the parties do not promptly put themselves right, or if they are neglecting anything, even where an accident has not happened, then we must report it to the Home Office, and their reply is one authorising the inspector to take proceedings for the penalty.

7572. Why is it that they always insist upon his taking proceedings, in place of taking proceedings themselves?—Because the inspector is

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their servant in the district; he is the person who transacts all their business for them in relation to this subject in the district.

7573. Do you find that you are always supported by your employer, the Secretary of State? I have always been so.

7574. Mr. *Greenall.*] Do you reside in the district?—Yes, I reside at Pendleton, near to Manchester, which is the very heart of my district.

7575. General *Dunne.*] You say that the Secretary of State authorizes a prosecution when you report a violation of a rule; are violations so clearly defined that you can always state them as violations?—No, the violation may not be clear; it may be a slight infringement, but not such an infringement as to be perfectly clear; and when it is not perfectly clear, I never recommend any proceedings.

7576. If an accident occurred, and the person was killed, would the relatives of the deceased, and those interested, in case of your not prosecuting, be damaged or barred in any subsequent proceedings which they might take?—No, it would not interfere with their action at all.

7577. Would it not prejudice them?—That it is not possible to say; it might be made a handle of.

7578. Have you never known a case where that was pleaded?—I only recollect two cases in which an action was raised in my district on the point, one being at the last Liverpool assizes; that is the only case that has come to a trial; the other was one that was raised about a year ago. When the accident took place, I went to see how it had happened, and investigated the matter myself, and I could see no proof of neglect on the part of the colliery owner, and I could see nothing to suggest there. The widow raised an action in that case, but it never came to trial.

7579. You say, I think, that many of the collieries in your district are not worked on the best and safest principle?—Some of them are not.

7580. In a case of that kind, would not the ground of action be sufficient, if the principle adopted were a bad one?—No, I do not think it would; I should not like to go to a jury on such a point.

7581. Even in a case where you might say, on examination, that you did not approve of the method?—But they might call eminent men on the other side to say that it was the best.

7582. You would seem to say that it is almost impossible to get at what is the best method?—Quite impossible.

7583. And, therefore, it is almost impossible to get at what is a violation of the law?—It is a matter of opinion.

7584. Do you think that there is any enactment which could define or make you the judge of a proper or improper working of a mine?—Not more so than we are now.

7585. Then there would be always a difficulty in that respect, you think?—Clearly.

7586. Mr. *Hussey Vivian.*] You say that you think it would be impossible to get at the best system. I presume you mean by that, that it would be impossible so to define the best system as to render the owner or manager of a colliery where an accident occurred liable in respect of not having adopted a particular system; is that what you mean?—It is.

7587. No doubt, if it could be shown that the ventilation of a pit was neglected, that gas was allowed to accumulate in various portions of the workings, and that there had been a general neglect, that would be sufficient to establish a case against the owner, would it not?—If there had been any neglect it would establish a case against him.

7588. What you mean is, that it would be difficult to lay down any specific systems for general adoption?—So long as the owner is working his mine on a dangerous system, but complies with the requirements of the Act of Parliament with reference to ventilation and any other points that he may be requiredto comply with, you cannot take any proceedings against him.

7589. In your own opinion, as I understand you, this system of which you have put in a plan is the best?—I believe that the extension of that system is desirable. That is a system which I found in Lancashire when I went there; it is a system upon which the Black mine in the neighbourhood of Oldham has been worked, I do not know how long, but at all events as long as I have known the district. Since then, in the year 1854, there was a colliery owner in that neighbourhood, a Mr. Joseph Jones, an old gentleman who is now dead, who wrote a book or a little pamphlet upon it, and made some models (he sent me a model), showing that system. Since then it has been urged by different people, and I should think by myself as much as anyone, and it has made a great deal of ground in the neighbourhood of Manchester. Many of the principle mines there are worked on that system, and I think with very great success. We have not had many serious accident in the district for a great number of years, and I think that it is mainly owing to the extension of that improved system of mining, and to the managers knowing what their responsibilities are.

7590. Have you ever known a serious explosion occur in a mine worked on this system?—No.

7591. I think you have had great experience in various coal districts in England, have you not?—Yes; I do not think that there is a coal district in the Kingdom which I have not acquaintance with; I have been in the mines in every district, and I have a practical acquaintance with many of them.

7592. You have said that you were articled as a mining engineer at Newcastle-on-Tyne?—I was articled at Newcastle-on-Tyne, and from there went to Sir John Guest's collieries in South Wales, and I was there for seven or eight years. Then I was in one of the collieries in Scotland for three years, and since that time I have been inspector of mines.

7593. In your judgment is this system, or a close approach to this system, applicable to all those various districts with which you are practically acquainted?—It is applicable to a large number, but where they have long work, as in Staffordshire, Shropshire, Derbyshire, and Nottinghamshire, wherever, in fact, the long work is being carried out, I consider that is really better; they find that, as a system, long work is the best and safest.

7594 Then you would prefer the long work to every other system, if it could be adopted?—Yes.

7595. Next to the long-work system, you would suggest

suggest this combination of stall and pillar and long work?—Yes, particularly for thick seams, where there is not sufficient rubbish to stow the places thoroughly.

7596. This is the system adopted by Messrs. Andrew Knowles & Sons, is it not?—It is adopted by Messrs. Andrew Knowles & Sons, in all their leading collieries now.

7597. Are they the largest colliery owners?—They are the largest colliery owners in my district. Perhaps they are the people that I had more trouble with at the commencement than all the rest put together, and now they are the people who give me least; they have got their mines put into first-rate order.

7598. Was their former system that which is suggested in this paper which you have put in?—It was not that.

7599. Did you compel them to introduce it?—No.

7600. They have introduced it, however?—Yes, they have introduced it of their own accord.

7601. You say that it is safer; will you state why?—Because it keeps the gas away from the working places, and it also keeps the weight of the strata off the face of work.

7602. I understand that the walls, as they are carried up each bay, remain, in your judgment, open for a certain length of time in the goaf?—They remain open for a long time. In many of the old workings you may go in sometimes for 100 yards or more by the side of these old walls.

7603. At any rate they remain for a considerable distance?—Sufficiently far to enable them to keep the ventilation away from where the workmen are at work.

7604. You not only by that system air the working place itself, but you send the air so many bays back from the working place, as I understand it?—You do.

7605. Can you state any instance in which you consider that this system would not be applicable to such seams as are now worked by stall and pillar?—It is not applicable in those cases where the colliery owner is not wealthy enough to drive his workings to the far end, or to some fault or remote end where he could begin to work back from. If he must begin to have coal put out in large quantities at once, he cannot work on that system.

7606. Then it is not in the nature of the seam, but in the peculiar position of the coal owner that the disability applies?—That system is applicable to almost every seam, to seams varying from three feet in thickness up to nine feet.

7607. In the case of a very strong roof which will not fall, is that system applicable at all?—Decidedly, but most roofs will fall in time.

7608. Is it applicable, I mean in cases in which great difficulty arises in bringing on falls?—I should say that in the case of a seam which had a very strong roof and would not fall, the weight must rest upon some place, and the probability is, that it would be resting upon the coal, and with a great weight resting upon the face of work you are liable to have large lumps of coal thrown off, which make it dangerous for the men. It is necessary to keep the weight off from the face of work.

7609. Practically speaking, this breaks behind you in steps, does it not; so that there is nothing in that portion behind which has been worked to keep up the strata, and prevent their breaking down?—It keeps the weight from leaning too much on the working face.

7610. In this plan that you have suggested, almost the whole of the open parts are actually working parts, are they not?—There is no part there but what is a working place, and there is no strait or narrow works which is called preparation work, driven until just before it is wanted, so that it may be ready for the fresh wide workings to be commenced.

7611. Contrasting that with the stall and pillar or board and pillar working, the common system is to drive up the boards first and then bring the pillars back, is not that so?—In some instances it is.

7612. During the time that your are bringing the pillars back the boards are all required to be ventilated, are they not?—Every one; it is a most complicated system of ventilation.

7613. What happens if they are not ventilated?—You get these great explosions. You will seldom, with ordinary care, find these great explosions where the mine has been opened out merely with winning out to the far end, and then drawing back as I have described it there.

7614. You get great accumulations of gas in all these abandoned stalls, or else you are required to keep up a costly system of inspection and ventilation?—Yes, requiring almost superhuman skill.

7615. So that it is to that that you chiefly direct your remarks as to your not, under any circumstances, taking the oversight of mines worked on some of the principles which are adopted?—That is so. I may mention that I find that the number of the workmen in my district has increased to this extent. According to the census in the year 1851, there were 18,249 miners; and in 1861 there were 23,525, showing a very large increase in the number of the persons employed. The colliery managers of the district, however, have not only been able to hold their own in regard to accidents against that large increase in the number employed, but there is an actual diminution in the number of accidents.

7616. What you mean is, that although the number of workmen has increased, the number of accidents has diminished?—It has. The numbers are given every year in the Reports, and they bear that statement out.

7617. In 1851, when there were 18,249 miners, the lives lost were 113, while in 1861 there were 23,525 miners, and the lives lost were 64, being nearly one-third more in population, and 50 per cent. less in point of lives lost and accidents?—Yes; perhaps it is a fairer way to take the ten years' average, ending 1861. There were 63-$\frac{3}{10}$ths separate fatal accidents, and 90 lives lost each year on an average of 10 years. Every year since that time, and in the latter years of the 10 years, there has been a diminution on the average.

7618. That you attribute to the adoption of this improved system of working?—To a great extent I attribute it to that, and to each colliery manager knowing what his responsibilities really are. But there is another point which I may mention. On going to the district I found that very few of the collieries had what we call a fireman, that is to say, a person to go round in the morning to see all safe for the workmen to go in; and now there are very few collieries without one.

7619. Can

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7619. Can you state whether or not this system of working to which you have been alluding is more economical or more costly than the former system?—Judging by the people who put it into operation, I should say that it must be more economical, because they do not work coal mines for the purpose of employing people; they work coal mines to make money out of them, and they work them on what they find to be the most economical plan.

7620. Have you ever known any case of a colliery owner who has adopted this system, going back to the old stall and pillar system?—Never.

7621. And therefore you apprehend that they find it commercially profitable?—That is the fair inference.

7622. Are you aware whether more or less large coal is produced by working on that system?—I believe that the quantity of large coal is very considerably increased by that system by keeping the weight off the working face.

7623. Can a man cut more or less in a day under this system than under the old system?—According to the way in which you arrange your work, you can arrange any amount of weight to bear on the face that you like. If you keep the lower ranks leading a little, that is to say, working the coal out in the lower ranks first, you make the coal work much easier, but it does not produce so much large coal (*describing it on the sketch*).

7624. In your judgment, can a man cut more in a day upon this system than upon the old stall and pillar system?—I should say that he would cut more upon that system, because there is a loose side.

7625. He has only one rib to cut?—He has only one rib to cut.

7626. And there are a number of men working alongside of one another, are there not?—They do not like to have many men alongside, because they make so much noise that one cannot hear when the coal begins to break, and to give warning of coming down.

7627. How many cutters are there, generally speaking, in each of these faces?—I was at an inquest on Friday last, where a person was killed by some of this coal falling upon him; there the bay was about 15 yards in width, and there were nine men and a boy there, and the objection was made that there were too many in to be safe; they do not like more than from half a dozen to eight men in each bay. The bays are generally about 12 yards wide.

7628. That would be two yards to a man?—About that; the men are not all getters, some are fillers and waggoners.

7629. The work of one man consequently assists the work of his neighbour, does it not?—Yes, they generally in a bay of that kind work jointly.

7630. In regard to the danger from falls of roof, is there any more danger of that by this system than by the ordinary stall and pillar system?—I am afraid there is; because simultaneously with this great diminution which has taken place in explosions, there has been an increase in the falls of roof; it seems that you cannot get an unmixed good, but that you must have a drawback of some kind: but taking the balance of the whole, the results are in favour of the system.

7631. And largely in favour of the system, are they not?—And largely in favour of the system; and not only that, but also as regards the sacrifice of coal. In Lancashire the person who works the colliery pays for the coal by the acre, and if he leaves coal behind of course he has to pay for that. In other districts, where they work by the ton, they do not care much if they do leave a few pillars; they tell you that it is cheaper.

7632. As to pit timber, do you consider this system more or less costly than the former system?—I should consider it more economical, because that system has generally been worked with what we call chocks, which are usually built of hard timber, two feet long by six inches square, so that you get a bearing of about four square feet upon the roof of the mine where each chock is set, and there are generally about a score of these in each working place.

7633. So that, in every respect, you recommend this system for general adoption where the long wall system is not applicable?—It might be going too far perhaps to say, in every case, but it certainly is generally applicable. It certainly suits my district well, and I have got it introduced in other places advantageously.

7634. Have you ever known any difficulty made, on the part of the men, to the adoption of this system?—Yes, the men do not like change.

7635. Do you think that that, in fact, is really the greatest difficulty?—Yes, I think it is the greatest difficulty; even now the men say that they do not like any bays being more than eight yards in width.

7636. Mr. *Liddell.*] When a man has been brought up in some particular way it takes him some time to change his mode of working?—Yes; and perhaps the man who objects to the change is a good workman, and he objects (and naturally) to being put alongside four or five others with whom he is to divide his earnings.

7637. *Chairman.*] Did I rightly understand you to say that your suggestion keeps the air away from the working face?—It keeps the gas away from it.

7638. But the air goes with the gas, does it not?—Yes; but where they have not had these walls built to enable them to keep the workings open behind, I have seen cases where the pick, on each stroke that the miner was making, has gone into the fire-damp, when they were working with lamps. Under such circumstances as that, if a fall of roof takes place, and perhaps drives a little gas out and damages the lamp, an explosion is inevitable; but if you have a current of air carried some little way into the old working, as well as up the face, you can remove the gas from the working faces.

7639. You said, just now, that when you first came into that district, in many of the mines there were no firemen at all?—In large numbers there were none, and in others they just put one of the working men to examine it among themselves. That is one of the important points. When I said, just now, that I had had difficulties to contend with, perhaps that is a point in which I had more difficulty than in any other.

7640. When you have had to visit the mines in consequence of an accident, you have come in contact with the firemen of the mines, have you not, and you have had to examine them; what opinion have you formed of them?—The firemen are generally selected from amongst the workmen;

men; they pick out for the office an intelligent man who understands gas.

7641. Have you reason to be satisfied with the competency of those men?—Generally. Now and then we met with a case of a person who has been appointed who does not know his duties.

7642. Is that a common case?—No; but it does occur now and then.

7643. What are their habitual wages, compared with the wages of the workmen?—I think that, as a rule, the firemen are not so well paid as the colliers.

7644. Have you anything to suggest with a view to getting a better class of firemen?—I think that is a point on which you must not interfere.

7645. It has been suggested that the firemen should be examined; do you concur in that suggestion?—I do not agree in wishing for such an examination; and I think that the finger might be pointed at many of the men who were put to examine them.

7646. Might not the inspectors examine the firemen?—We are governed by antagonism so much that if you had an inspector to examine a fireman the result would be this; you would have passed, as it were, that man, and if anything happened under his hands you would be somewhat implicated in it. In the mines I think you cannot keep the inspector too far removed from any responsibility, so that he may look upon matters in a disinterested point of view, not being in any way implicated.

7647. When you have had to visit a mine in consequence of an accident, arising from deficient ventilation, and you have found the ventilation defective, have you had reason to suppose that the defects, whatever they were, have been of some standing?—When information has been sent to me of danger, I have generally found that it has been understated rather than overstated.

7648. And that the state of things complained of has been going on for a considerable time?—Generally; the complaint is not sent generally without sufficient cause.

7649. But I am speaking now more particularly of the length of time for which the mine might have been in a dangerous or unsatisfactory state before you knew anything of it?—I think that the men generally give the manager an opportunity of putting things right before they send for the inspector.

7650. So that a mine may have been and may be now in a dangerous state without your knowing anything of it?—Quite possibly, and without any chance of my finding it out.

7651. You say, I think, that the most frequent cause of accident in your district is the falls of roof; as far as you have had occasion to observe are the workmen properly supplied with timber according to the requisitions of the Act?—Yes, I should think it an exceedingly rare case indeed to find any deficiency in the supply of timber; but now and then I have had complaints that the supply was not sufficient.

7652. Mr. *Fawcett.*] Would your experience lead you to propose or advocate any further legislative enactments in regard to ventilation; would you suggest any alteration in any existing Act of Parliament, or any further strengthening of existing Acts?—As I have already said, these words "under ordinary circumstances" do throw difficulties in the way, but I am not prepared to say that they are unfair between the two parties. You have to look at the coal-owner as well as at the coal worker, and it would be very unfair to the coal-owner if he were bound under all circumstances to keep his mine ventilated, because there are such things as a large upheave of the floor taking place suddenly, and a large quantity of gas suddenly coming into the working. If the words "under ordinary circumstances" were not in, you would be putting a duty on the coal-owner which he could not perform under such circumstances as I have referred to.

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7653. Speaking generally, you are satisfied with the Act, as I understand you?—I think it a very good Act; it only needs putting in force to do really all that is wanted of it.

7654. Mr. *Liddell.*] Many of the witnesses who have been here, in fact, most of them, have expressed a very strong desire for more inspection and a larger number of inspectors; do you agree in that view?—I do not agree in the view that any large number is required in addition. There may, from time to time, arise circumstances requiring some addition; perhaps a district may grow too large for one inspector, and the time may then have come for a re-arrangement of the districts, and perhaps for the appointment of another or more than one inspector; but I do not think that time is come now.

7655. Is there not a strong desire among the men to be made sub-inspectors themselves?—I have had a great many applications sent to me for the appointment, if I may judge in that way.

7656. Would you approve of experienced workmen being promoted to that position?—It would take a great deal of hard work off the inspector if he had such assistants, and to that extent it would be very desirable; but I do not know that we could become answerable for all that such a man might do. If he popped down a pit at two o'clock in the morning (as people have suggested should be done) to catch them, as it were, I am afraid that he would be taking responsibilities upon him that we should never take, and he would do more harm than good; and I am afraid not only so, but you (the inspector) would take so much upon you that the first question at the inquest would be, "How was it that the inspector did not point these things out?" and instead of the inspector standing there as a disinterested person, having nothing to do with the thing but to unravel it, he would be one of the parties concerned, and would have to keep himself clear; and as inquests were conducted in olden times, it would be laid down to the jury as one of the mysteries that could not be unravelled, and it would not be unravelled.

7657. Then, in your opinion, the appointment of sub-inspectors, though it would be attended with some advantages, would be attended with disadvantages more than proportionate to the advantages?—I think so; it would prevent an inspector looking at the subject from a distance just great enough to enable him to act impartially in the matter.

7658. These appointments would be very popular among the men, would they not?—As a rule, the working colliers are a quiet class of men, and they do not care much about it, I think.

7659. Then you do not think, as I think, that their

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their anxiety to increase the class of sub-inspectors is owing to their desire to obtain the appointment for themselves?—I would not say that, because I have no grounds for saying so. They may think that this sub-inspection would give them all the benefits they wish; but, from my point of view, it would be better to repeal the Act of Parliament altogether than extend the inspection beyond the present limits.

7660. I do not refer invidiously to that desire among the workmen. If a workmen feels himself to have gained that amount of experience which would enable him to fill the position of sub-inspector, it is rather a laudable ambition with him, is it not, to take charge of the lives and safety of the other workmen?—I think so, to a certain extent. When an accident happened near Wigan lately at one of the collieries, the delegate there, Mr. Pickard, went round the place, and attended the inquest, and gave valuable evidence.

7661. He discharged his duty with ability, you think, in that case?—With great ability. If a colliery owner were asked by one of the men to be allowed to investigate the matter on any accident taking place, I do not think that any colliery owner would refuse unless there was something objectionable in the individual. The men have great power, and their fair representations are really well attended to; there is no tyranny carried out, either on one side or on the other.

7662. As to Rule 3, have you any observation to make about the use of safety lamps?—No, I think that is a very good and proper rule; there is no objection to that.

7663. As to Rule 4, "Every shaft or pit which is out of use, or used only as an air-pit, shall be securely fenced;" is that properly attended to in your district?—Yes, that rule has produced an immense amount of good. In one colliery alone I recollect getting 84 old pits fenced, and now there is scarcely such a thing as an unfenced one to be met with.

7664. Rule 7 says, "Every working pit or shaft shall be provided with some proper means of communicating distinct and definite signals from the bottom of the shaft to the surface, and from the surface to the bottom of the shaft;" is that attended to?—That is carried out generally.

7665. Has it been properly carried out since 1860?—Yes; that rule is an improvement upon the previous Act.

7666. Have you known of accidents happening from the neglect of that rule?—Yes.

7667. But upon the whole, you say that it is properly complied with?—Yes. Now and then, however, we find that the signals are neglected to be given, and that accidents do happen.

7668. You have no alteration to suggest in any of the general rules, as I gather?—No, I do not see that it is necessary; they seem very excellent rules, except as to what I have said with regard to the second one.

7669. I should like you to put that a little more clearly before us; what is the actual wording of the alteration that you suggest in the second rule?—I do not suggest any alteration; I think that as it stands the balance is in favour of the good in it, but that now and then a person takes advantage of it to disregard his duty under the first rule.

7670. How long do you suppose it would take you to inspect all the mines in your district; would it take two years to go through them thoroughly?—If you take some of the thin mines, where the workings are only about two feet high, and where perhaps there may be fully 40 miles of underground gallery open at one time, I do not think I could do it; I would not set out on such a journey.

7671. Do you think that efficient inspection would require you to go through every gallery?—To make yourself satisfied that there was no accumulation of gas, that would be necessary.

7672. Are you aware that there is a feeling among the miners in the district that the inspection is not sufficient?—I am aware that it has been so stated, but I am not aware that there is any cause for it. When any persons want the inspector, if they send me word, I attend to it, and I let it be distinctly understood that they must not expect me unless they send me word, and that they must point out clearly the place to which their complaint has reference.

7673. Sir *Philip Egerton.*] I see that a great number of the accidents recorded in your annual reports occur in shafts. With reference to the winding machinery, are the cages provided with safety catches and disconnecting hooks?—We have a very large number of safety catches in my district; I should say more in my district than in all the rest of the districts in England put together.

7674. Do you approve of that precaution?—Yes, I do.

7675. What system of catch do you recommend?—Owen's is the system that I find works best.

7676. You have guide rods in the shaft, I suppose?—Wooden conductors.

7677. Mr. *Fawcett.*] Would you have the use of these catches enforced by Act of Parliament?—No, I would not; for this reason, that now and then you may meet with a case where perhaps the shaft, from some circumstance or other, being an old shaft, for instance, is a very small one, and where, if you had these catches, instead of holding, they might break the conductor rods, as they occasionally do, and you might get such an amount of *debris* down the botton of that shaft as would stop the working for a long time.

7678. Sir *Philip Egerton.*] I see that there are some accidents recorded here from over winding. Have any of the mines in your district disconnecting hooks attached to the cages?—There were one or two in the district, but I think they have been taken off.

7679. Why were they discontinued?—Because generally the rate of winding is so rapid that the momentum would carry the cage up to the pulley.

7680. That would happen in consequence of the rapidity of the winding?—Yes, and it would be introducing a source of danger which would be greater than the good that would be attained; I am an advocate for the safety apparatus, but not for the disconnecting catch.

7681. Mr. *Hussey Vivian.*] As regards the shaft accidents which are reported in your annual statement, I see that those are divided into accidents from the breaking of ropes, and so on, according to the nature of the accidents?—Yes. As regards their being a cover over head when persons are being lowered or raised, that is provided for by the ninth general rule in cases where it is required by the inspector. I have given

given every colliery owner notice in my district, that with the exception of gins or windlasses, or in pumping shafts, or during sinking, I require that cover to be provided, but if there should happen to be any special case as regards their colliery, they are to bring it under my notice.

7682. Sir *Philip Egerton.*] Then you exceed, I suppose, the general rule, number 9, which restricts the covers to the lowering and raising of persons; do you recommend it in all cases?—No, only where they are conveying persons; it is very rarely that they think of taking it off, although they do sometimes.

7683. Mr. *Hussey Vivian.*] I see that in 1864 there were 184 lives lost by accidents in shafts, out of which only 17 were from ropes breaking; is not that so?—If it is stated in those tables, I have no doubt that it is so; those are reports made by the inspectors, and are no doubt correct.

7684. Can you state how many lives have been saved by the use of the safety apparatus?—In about two accidents out of three it acts, and perhaps in one out of three it fails to act; either the conductor has not been strong enough, and they give way under that, or the catches have not been close enough together.

7685. Generally speaking, the machinery is engaged in winding coal, is it not, or can you state what proportion the journeys of men bear to the journeys of coal?—It depends very much upon the number of tubs you bring up at one winding. In some instances we bring six tubs up at once, and in other instances only one.

7686. The proportion of the journeys made by coal is large in comparison with the number of journeys made by men, is it not?—Yes.

7687. And a good many men go up in the cage at one time, do they not?—Yes; generally the weight is over one-half of the load of coal.

7688. What is the relative weight in the two cases, if you take a journey of coals and a journey of men?—In the shafts, where the winding is very quick, I always consider it safer to come up with half a load of coal; I think that there is less risk of being over-wound if you come up with a cage partly loaded than if it is empty, because the velocity is so great in the middle of the shaft; something like from 20 to 40 miles an hour, averaging throughout about 25.

7689. The velocity is so great that it makes a very great impression on the tympanum of the ear?—Yes. It is well always to take care not to have the living load so great as the dead load, so that if there should be any break the liability to go should be with the dead load, and not with the living load.

7690. Inasmuch as the living load is always lighter than the dead load, the probability is that if anything happens it will happen with the dead load?—That is a probability, though it is not always the fact.

7691. Does it frequently happen that the rope breaks?—It does not frequently happen at one colliery; but when you come to look at the number over the whole district, I have no doubt that a large number break in the year.

7692. Can you state in how many accidents those 17 men lost their lives; how many of them lost their lives at a time; does your recollection serve you for that?—That is a matter on which I should have to refer to the particulars of each accident; each one is described in detail.

7693. Most probably two cases, or something of that kind, would be sufficient to account for the 17 men who lost their lives by the breaking of the ropes?—I do not remember the number; sometimes the rope has shown signs of decay, and in such a case as that, I have known compensation paid by a colliery owner in my district upon application being made, without going to law about it, where there was neglect. Sometimes a rope will break without showing any sign of giving way.

7694. Is it within your knowledge that lives have been saved by these safety catches to which reference has been made?—Yes, it is; although I could not give you a list of them now.

7695. Have you ever known accidents occur from the use of the safety catches?—Yes; formerly they used to be so common that people who had the safety apparatus on took it off, because of the catches catching them as they were going down.

7696. The rope slurring on the top of the cage, and then eventually starting the cage with a tremendous velocity down the pit?—Yes; I remember that one colliery manager told me that he had been left in the pit, hanging by the catches, with 60 yards of loose rope on the cage; the catches having come into operation without any rope breaking.

7697. You consider that the present Owen's apparatus is perfectly safe?—It works with perfect safety; we run at very high speeds, and it does not catch.

7698. Sir *Philip Egerton.*] I see that there are in this report 15 cases of accidents from explosion of gunpowder. In your opinion would not the use of copper tamping rods and needles prevent a great number of those accidents?—Yes, it would.

7699. Are they used at all in your district?—In a very few cases only; instead of copper tamping rods we use cartridges; but there is another common kind of accident which I may mention. If the men have had a shot which has missed fire, instead of taking the trouble to make a new shot, they attempt to draw that stemming; they think that if they put water in the hole that is a sufficient protection, and in some instances it is so; but the drilling tool is in advance of the water, and strikes fire in advance of it. I was at an inquest last week, where a man was killed from an accident of that kind.

7700. Have you ever tried gun cotton in the mines?—Not for many years.

7701. *Chairman.*] Would there be any objection to putting a limit to the speed of the winding?—It is just as safe in a shaft as in the case of a railway train.

7702. You say, I think, that you go at the rate of 40 miles an hour sometimes down the pit?—Yes, the speed is as great as that at the greatest, averaging about 25 miles an hour including starting and stopping.

7703. It is the rapidity of the winding that leads to the danger, is it not?—If there is a difference, I believe that is safer to go at the ordinary rate of winding than at an altered speed. The engineer who works the engine-works does it so mechanically that it is seldom once in a lifetime that he makes a mistake, but if you put him on something different as to speed, he might make a mistake.

7704. If he were used to a slower rate it would be still safer than if he were used to a faster

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faster rate, would it not?—Perhaps so, but then it would be impossible to raise the amount of coal.

7705. Is not safety sacrificed to economy in the high speed at which the winding is now done?—The pulleyings are very rare, there was one last year; it was a man who had just taken charge of the engine, and who did not know how to work it properly, and he overwound the cage into the engine-house upon himself; it is the rule to slacken the speed of winding generally when men are riding.

7706. Is there anybody whose business it is to look at the chains in a mine?—Yes, that is defined by the special rules.

7707. Mr. *Hussey Vivian.*] As regards speed, is it possible to get the produce out of a deep mine unless you go at a high speed?—Utterly impossible.

7708. *Chairman.*] Do you think that there is any objection to the men going up the furnace shaft?—I do think so, and I believe that we shall be having some accidents in some of the up-cast shafts. I believe that there will be a number of men suffocated some day; until that happens I do not think we shall succeed in getting any attention paid to the subject.

7709. That is one of the subjects then on which you wish to offer a practical suggestion?—I have tried to get the men to say that they prefer the down-cast shaft, but they do not.

7710. We have had some evidence of the inconvenience of the men travelling up and down the up-cast shaft?—They do it constantly, however.

7711. We have had evidence of the inconvenience and danger of it; you would agree in that evidence, would you not?—I do agree in it, and I should be very glad, when there is another means of getting into the pit, to see the men availing themselves of it.

7712. There always is another shaft, is there not?—It is not always that the winding apparatus is going in the other shaft. But there is another circumstance to be borne in mind; the collier may have been working on a winter's day in a place in the mine where the temperature is from 60 to 70 degrees, and many of these men prefer coming up the up-cast shaft; it is enough to perish them with cold to bring them to the down-cast shaft. That is the result of my inquiries among the men. I always go round myself, if there is a convenient way of getting out; but I do not find that the men take that view of it.

7713. Then what are the dangers or inconveniencies that, in your opinion, counterbalance the advantage?—The exposure to cold is what leads the men to prefer one to the other.

7714. You admit that there is some advantage in going in the up-cast shaft?—Yes; it is warmer; the men do not get chilled when they go up in that way.

7715. What are the inconveniencies and the dangers that, in your opinion, counterbalance that advantage?—That is the great counterbalancing advantage, the avoidance of chilling the men.

7716. But then what is the danger and inconvenience that counterbalances that advantage?—The danger that the men might get suffocated.

7717. Have you ever known accidents happen from their using the up-cast shaft?—No. If I knew of some accidents I think perhaps I could have made more weight upon that point. I have endeavoured to stir up a feeling in my district against riding in these deep up-cast shafts, where there are sometimes three or more boilers at work at the bottom, and where there is a large furnace, and the air is very much vitiated.

7718. Are you prepared to recommend any positive prohibition of the men riding in the up-cast shaft?—No, I am not.

7719. In your opinion, it is a bad practice, but you are not prepared to recommend legislation to check it?—I think that you would not carry the feelings of the working men with you if you attempted to stop it by legislation; they would think that you were punishing them.

7720. Though they might think that, you would, in your opinion, be saving them from danger by such legislation?—You would save them from being suffocated; but perhaps if you give them rheumatism you give them what is worse than suffocation.

7721. Altogether, then, as I understand you, you have not a very decided opinion upon that subject?—No; it is one of those mixed points with which it is difficult to interfere.

7722. Mr. *Liddell.*] We have had it in evidence, that the winding in the up-cast shaft affects the ventilation of the mine injuriously; is that a sound allegation?—No, I think not.

7723. It is not true, in your opinion, that the machinery and the action of the machinery impede the current of air, which is what we have been led to believe?—If you have two ropes in the up-cast shaft, one may be doing good as the other is doing harm.

7724. The mischief which one does is counteracted, you think, by the good which the other does?—To a great extent that is so. If the airways are large, it is found in practice that you may send almost any amount of air through the shafts; keep the airways large, and that need not be an objection in practice.

7725. In regard to the rope that is used, is it wire rope or ordinary rope or chain?—Generally wire rope; sometimes hemp; chains are prohibited for winding men with.

7726. It is rather a difficult thing to watch the wear and tear of those ropes, is it not?—It requires constant attention.

7727. Is there any mode adopted by manufacturers for testing the strength of the wire ropes?—Not after they are put on.

7728. But, before they are used, is any such mode adopted?—As a rule, before the rope gives way, the sewing of the strands gives way, and if it is a round rope you will find that one strand will begin to draw more than another, or that wires will stick out. In a large number of cases there is a warning given in that way of the danger.

7729. In one of your answers relating to the thin mines, you told us, did you not, that it would be absolutely impossible to inspect the thin mines in a certain portion of the mines, and I understood you to say that the ventilation of the thin mines is more difficult to manage than in the larger workings?—It is no more difficult to manage than the ventilation in a thick mine; indeed, rather easier, because in a thick mine you have to throw the air up into the high parts by bratticing, whereas in the thin mines it sweeps every place clean.

7730. You said that the workings in the thin mines

mines were often not above two feet in height; is not the working in galleries of that limited height very painful to the men?—Very; unless you are constantly at it every day, keeping those particular muscles in play, it makes you as stiff as possible.

7731. Is there a great difficulty found in getting labour in those thin mines?—In the thin mines now there is difficulty. There is a great demand now for labour, and in some of the mines (for instance, in mines about a yard in thickness), the men will not work so cheerfully, and there is a difficulty in getting men into them at all.

7732. Then I presume that the rate of wages paid in those thin mines must exceed considerably the ordinary rate of wages?—Yes; only there is another counterbalancing matter to be taken into account, and that is, that some men who are perhaps cautious men, and who have been accustomed to work in a thin mine, find it safer, and they prefer the thin mine to the thick one. But, as a rule, when a man who has been brought up in a thin mine gets to work in a thick mine, he prefers the thick mine to the thin one, and will never come back to the thin one again.

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7733. When you say that the thin mine is safer than the other, you mean that it is much less liable to falls of coal, and if such a fall does take place it is much less serious?—Yes.

7734. Does the working in the thin mines affect the men's health, prejudicially, by the constrained position in which they are compelled to work?—No, I do not think so; in the thinnest mines in my district in the neighbourhood of Shaw, between Rochdale and Oldham, some of the men work partly, and some perfectly naked. When they have to work on their side in a little water, rather than have wet clothes on them they prefer to work altogether naked, but they look as well as possible, and their health does not seem to suffer.

Friday, 1st June 1866.

PRESENT:

General Dunne.	Mr. Kinnaird.
Sir Philip Egerton.	Mr. Liddell.
Mr. Fawcett.	Mr. Neate.
Mr. William Orme Foster.	Mr. Hussey Vivian.
Mr. Greenall.	Mr. Woods.

CHARLES NEATE, Esq., IN THE CHAIR.

RALPH MOORE, Esq., called in; and Examined.

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7735. *Chairman.*] YOU are an Inspector of Mines under the Act, are not you?—I am.

7736. For what district are you inspector now?—I am inspector for the eastern district of Scotland.

7737. How long have you been inspector there?—I have been inspector for four years.

7738. Were you inspector of mines under the previous Act?—No; only under the Act of 1860.

7739. Where were you before that time?—Before that time I was engaged as a colliery manager and mining engineer.

7740. As a colliery manager, in what part of the country?—Principally in the Glasgow district.

7741. Have you had to do with the management of collieries out of Scotland?—No; I have not had to do with the management of collieries out of Scotland, but I have visited them, and I understand the modes of working adopted in England sufficiently to enable me to compare them with the Scotch modes of working.

7742. Both as to the mode of working and as to the management of the workmen, I suppose?—Yes.

7743. We have begun with the question of boys generally; what is the fact as to the boys in your district; are there many boys employed between the ages of 10 and 12?—In 1864 I sent a circular on the subject to the employers, and they all returned that there were very few boys employed between the ages of 10 and 12.

7744. That was their return to your circular?—That was their return to my circular; I made made out a calculation that there were about 244 boys of that age.

7745. Two hundred and forty-four in your whole district, do you mean?—Yes.

7746. What is the number of workmen employed in your district?—The number of workmen employed is 21,150.

7747. As to those boys under 12, could they read?—They could all read, they said.

7748. Who said so?—That was the return to my circular.

7749. That is to say, the masters said that the boys could read?—Yes.

7750. Did you ask them, in your circular, whether they required certificates of attendance?—I asked them if the boys could read and write, and if they required certificates; they said that they did not employ any until they were 12 years of age, or unless they could read and write before going into the pit.

7751. There seems to have been some confusion among the Scotch owners of mines, in some cases, in supposing that both certificates were required. The Act, as you know, requires a certificate either of being able to read and write, or a certificate of attendance of those who cannot get the first certificate?—I think they understand pretty well that if a boy can read and write, and he is above 10 years of age, he only requires one certificate.

7752. We have heard what the work of those boys is; what is your opinion as to the work that they do between the ages of 10 and 12?—Except for trappers, the masters do not employ boys under 14 years of age.

7753. Then the boys under 14 are not set to hard work; is that so?—The boys under 14 are employed by the workmen themselves mostly.

7754. But you are speaking now of the boys employed by the masters?—Yes, they are not at hard work under 14.

7755. But as to the boys employed by the workmen themselves, what is the state of the case?—The boys employed by the workmen themselves, are employed in drawing coals, and it is hard work.

7756. Are they included in the number 244?—No, the 244 are the boys between the ages of 10 and 12.

7757. But that number includes both those employed by the masters and those employed by the workmen themselves?—Just so.

7758. Are the workmen allowed to employ other boys besides their own children?—Yes.

7759. The masters do not interfere?—The masters do not interfere if they are above 12 years of age.

7760. When we speak of boys now, let us confine ourselves to boys under 12; do the masters allow the workmen to hire boys under 12 years of age?—No; unless they comply with the conditions.

7761. But they do not interfere, as I understand you, with the workmen having boys not their own?—No.

7762. And those boys are subject to harder work than they would be if they were under the master?—Yes, they are.

7763. What

7763. What proportion of the 244 boys were employed by the masters, do you suppose?—I really cannot tell.

7764. What is your opinion as to the hours of the boys, taking their hours and their work together; is the length of time too much for them, or not too much?—I do not think that the boys are too hard worked, though it is hard work, no doubt.

7765. The trapping is not hard work, but the drawing is hard work?—The drawing is hard work.

7766. Are the boys fit to go to school after they have been at work in the day?—I do not think so.

7767. If they are not fit to go to school, is it not harder work than the Legislature contemplates?—Well, it would follow, I think, that it is hard work; the work is so hard, that I do not think boys can attend school after coming out of the pit. First, there is the distance they have to go home from their work, and then they have to wash themselves and to change their clothes more than boys working at other trades.

7768. What is the result of the system upon the education of the boys, speaking specially of those under 12 years of age?—I think that there are very few such employed; in fact, the masters generally set their faces against boys under 12 years of age being employed.

7769. You have said, however, that there are 244 between those ages?—There are 244, but out of more than 20,000 men that is a very small proportion.

7770. You think, however, that taking boys under 12 years of age for employment in the mines would interfere with their education?—I scarcely see how a boy can be educated at all if he cannot read before he is 10 years old.

7771. If he has got a certificate of being able to read, he is not bound under the Act to attend school?—No, he is not bound to attend school any more.

7772. What is your opinion as to the employment of boys under 12 years of age?—I think that no boys should be employed under ground until they are 12 years of age; unless a boy can read before he goes down the pit I think there is small chance of his learning afterwards.

7773. Would you allow him to go down if he could read?—Not till he was 12 years old, I think.

7774. And then would you allow him to go down if he could not read?—No, I would not allow him to go down at all if he could not read.

7775. He must be 12 years of age, and be able to read in fact, in your opinion?—Yes.

7776. How many hours would you let him work?—I do not see how you could interfere with the hours that boys work in the pit; you could not have relays of boys.

7777. You heard what Mr. Dickinson said on that point, did you not?—Yes.

7778. And you agree with him as to the difficulty of having relays of boys?—Yes, I agree with him as to the difficulty of having relays; but I think that Mr. Dickinson rather leaned to the opinion that boys might be employed between the ages of 10 and 12.

7779. You agree with him at all events as to the difficulty of having relays of boys?—Yes; it would be quite impossible to have relays of boys.

7780. In some mines they have relays of men, have they not?—Yes, relays of workmen.

7781. Why is it so much more difficult to shift the boys than it is to shift the men?—The men that work in eight hours' shifts are colliers who are paid so much per ton for the work which they put out, and not paid by the day; what we call in Scotland the "Oncost" men are men who are employed otherwise than in hewing coals, and are paid by day's wages, and they all work 10 hours, or as long as the pits work.

7782. You have seen mines where they work with double shifts, have you not?—Only the colliers work in double shifts in the mines that I have seen.

7783. Why is it more difficult to change from one set of boys to another than to change from one set of men to another?—I was going on to say that the colliers, being paid by the ton, they can work six hours or eight hours, or any number of hours they like; but a boy is paid by the day, and he has to do his day's work.

7784. But if he worked a shorter time he would be paid a shorter time, would he not?—Yes; but he is employed, we will say, in keeping a door; you could not have him at that work less than eight hours. The pit only draws 10 hours, perhaps, and to have a boy for the other two hours would be out of the question.

7785. You think that it would be a great waste of time and money to shift the boys, as I understand you?—Yes, besides the danger that would be involved in these boys riding up and down the pit.

7786. You think that there is more danger in boys being shifted, especially young boys, than there is in men being shifted?—Yes; it is not safe for boys of that age to go up and down the pit by themselves.

7787. Then the conclusion which you have come to upon this point is, that you would not allow boys to go down the pit under 12 years of age, but that you would not interfere as to the hours of labour?—Just so.

7788. You heard what Mr. Dickinson said about the women, did you not?—I heard what Mr. Dickinson said about the women, and I agree with him entirely. It would, I think, be doing a very great injustice to these honest people to prohibit women from working on the pit bank.

7789. General *Dunne.*] Do you know what number of boys are employed by the workmen besides the 244 that you have spoken of?—I do not, except from the census. I have tried to make out that, and between the ages of 12 and 14 I think there are 867 in my district.

7790. That is in addition to the 244?—Yes.

7791. Then there would be upwards of 1,000 in the district altogether?—Yes.

7792. You entirely object to boys under the age of 12 going down the pit?—Yes, entirely.

7793. And the masters are of the same opinion, as I understand you to say?—The masters are of the same opinion.

7794. You say that it is not safe for boys to go down by themselves into the pit; up to what age would you say it is not safe?—I think up to 14.

7795. Then you think that boys between the ages of 12 and 14 ought not to be allowed to go down the pit by themselves?—I think not during working hours.

7796. Would not that be a reason for not allowing them to go down at all?—No; because they might go down with the men in the morning.

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7797. You say that that is the objection to relays of boys?—Yes, the objection to relays would be that boys would be going down by themselves.

7798. Therefore, would it not be better for them not to go down at all till they were able to go down by themselves?—That does not follow, I think. It is safe enough for them to work under ground when they are between 12 and 14.

7799. What is the distinction which you draw between boys from 12 to 14 years of age and those under 12, if they both can work with equal safety below, and if they are equally exposed to the danger in going down?—A boy below 12 is of very little use down the pit; and I do not think that boys between 10 and 12 working below can get any education.

7800. Then it is on account of the education rather than for any other reason that you object to their going down?—And because of the very little use that they are before 12 years of age.

7801. Do you know whether in the north of England it is the practice for boys of that age to go down the pit by themselves?—That I cannot say.

7802. Are the women employed in Scotland on the pit's bank, or are they employed in any other species of employment in the collieries?—Only on the pit's bank.

7803. Never below?—Never below.

7804. Mr. *Foster.*] I suppose you would not trust a boy by himself if he commenced descending the pit at 14, till he had been accustomed to go up and down some little time; even at that age it would be hardly fair for boys to be allowed to descend by themselves, would it?—They seldom descend by themselves until they are 14 years old, I think.

7805. A boy descending alone at 14, would descend with much more safety, would he not, from having been at work in the pit from 12 years of age, than he would if he only commenced descending at 14?—He would.

7806. You said that you would not wish a boy to go down the pit even at the age of 12 unless he could read and write?—No, I would not wish it, and my reason for saying so is that if boys are to be educated at all, they must be educated before going down the pit.

7807. But would you forbid a boy being employed down a pit at 12 years of age or upwards, merely because he could not read and write?—The law now says that he must read and write before he goes down at 10 years of age. I would shift the time two years, and say thut he must be able to read and write before he goes down at 12 years of age.

7808. Would you extend that qualification for employment to other departments of industry?—I can scarcely answer that question. I am confining myself to boys who work under ground. From the nature of their work and the extra time that they take betwixt leaving their work and being able to get ready for school, I do not think that they are able to go to a night school afterwards.

7809. You mean to say that it would be desirable that they should read and write?—I mean a little more than that. I do not think that they are able to learn to read and write between the ages of 10 and 12 under the present Act; and if they are to learn to read and write at all, they should do so before going down.

7810. Have they any more facilities for acquiring the knowledge of reading and writing if they go to work in iron works or in factories, or in foundries, or at any other employment which takes up the whole of the day?—I can scarcely answer that. I do not think there would be much difference, but 12 years seems to me to be early enough to go to work down below.

7811. I merely wish to ask you whether you see any more reason for forbidding a boy from working down a pit before 12, merely because he cannot read and write, than you see for forbidding any other kind of employment before that age?—No reason except what I have given already; the long time that it takes a boy after leaving his work in the pit to come home, wash himself, and get his meat; it takes a longer time for a boy working in the pit to do that than it does for a boy working on the bank.

7812. You have been asked as to relays of men, and with respect to the desirableness of having a double shift of boys; are you aware that relays of men in the coal districts are not customary, but are rather the exceptions?—They are exceptions, I think; but I can easily see how, in the case of colliers who are paid by the ton of coal they put out, or by the quantity of coal they put out, there could be two shifts much more easily than there could be relays of boys who are doing day work.

7813. Still, even in such cases, it is merely exceptional, is it not?—It is exceptional to employ relays of colliers.

7814. The common practice in collieries is that there is no ascending and descending of men during the day's work in the generality of cases?—Yes, that is so.

7815. Mr. *Greenall.*] Have you intended to give it as your opinion that you would not allow boys under 12 to work in collieries at all?—That is my opinion.

7816. Mr. *Liddell.*] You say that the masters, for the most part, object to employing boys?—Yes.

7817 Then, how come they to be employed?—I think it is very much owing to the colliers insisting on taking them in unknown to the masters.

7818. I presume, then, that if the employment of boys were prohibited by law, there would be some objection made to that on the part of the parents, would there not?—There would.

7819. Do you think it would be a very unpopular law?—I can see that, according to the statements made in the petition of the miners, they want such a thing; but I do not think that it is generally wanted by the colliers themselves. Any colliers that I have spoken to about it are indifferent.

7820. In fact, your evidence goes to show that it is not the desire of the masters to employ boys, but that it is the parents themselves that do it; and you also think that the law would be very unpopular if the parents were prohibited from employing them?—I think it would be unpopular among the workmen, but not among the masters.

7821. What do the boys earn, for the most part?—Boys employed as trappers earn, perhaps, 1*s.* a-day; but when a collier takes his son with him, if he is a boy of 14 years of age, he puts out more than 1*s.* worth of coals; that is to say, supposing a collier was making 4*s.* a-day, he would say that he was entitled to put out 2*s.* or 2*s.* 6*d.* worth of coal for the work of the boy, though the

the boy would not be able to work that himself.

7822. He would not earn that, you mean?—He would not earn that; but still the man would be entitled to put out so much additional coal, and that would be making it 6*s.* 6*d.* a-day for himself and his boy.

7823. I do not quite understand the meaning of that phrase, "entitled to put out"; would you explain that to us?—You have heard, perhaps, of a collier making 5*s.* a-day; that means, that he works a certain quantity of coals at so much per ton, equal to that sum; he is frequently able to work more, but he does not, because that is his restriction. If, however, he has a boy 14 years of age, he is entitled to put out an additional quantity on account of that boy, and is thus enabled to make a higher rate of wages.

7824. Now let us go back to the case of a boy under 12; this permission given to the collier to work an extra quantity of coals with a boy of 14 is, I presume, an arrangement between him and the master?—No, it is an arrangement, I would rather say, amongst the workmen themselves.

7825. It is a law of the union, then?—Well, you may take it so, perhaps.

7826. Does that regulation of the workmen extend to boys below the age of 12, or would the collier with a boy of 12 be equally entitled to work an extra quantity of coals if the boy's strength permitted him to carry it away?—It is not a question of the boy's strength; the boy may not carry them at all, or he may carry them. Although the boy may not be able to earn 6*d.* a-day, yet the fact of the boy being there, and of his being of a certain age, enables the workmen amongst his fellows to put out an additional quantity of coal, and to make a higher wage for himself than he would otherwise do.

7827. At the expense of the boy, you mean?—On account of the boy, rather. The boy himself does not work harder, it may be.

7828. But when you talk of putting out a quantity of coals, who puts the coals out; it is the boy, is it not?—No, the collier puts them out.

7829. This is a trade restriction, in short?—It is a trade restriction.

7830. The state of the case is simply this: you are no doubt very well aware that we have a complaint on the part of the men of the employment of children, as they call them; that is to say, of boys under 12, and they want further legislation to stop that; but now, as I understand from you, the fact is that the employment of these boys is discouraged by the masters, but encouraged by the workmen?—That is the state of the case.

7831. And that there are trade restrictions, actual laws framed amongst the men themselves, by which the employment of these boys is absolutely encouraged; am I right in supposing that?—You are right in that.

7832. Then the men are now asking for the law to protect them against themselves?—That is so.

7833. I should like to have your opinion, as an intelligent gentleman, upon that subject?—My opinion is that boys should not be allowed to go down the pit under 12. Above 12 I do not see that the men have any cause to say anything against it; but it rests entirely with the workmen themselves, and not with the masters.

7834. But is there not something which it almost seems to require legislation to prohibit, when we find these arbitrary restrictions being imposed by one set of workmen on another set of workmen?—I do not see how that can be prohibited. If the workmen agree to work only a certain quantity of coals they will do it. I may give you an example derived from one of my districts, the Wishaw District. Until about six or eight months ago a collier there used to put out four tons a-day for a certain wage. A few months ago the men agreed to put out three tons only, and are now doing so, and they are getting as much for the three tons as they did for the four.

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7835. Then the object of that arrangement, I suppose, is to limit the supply of coal?—I think that follows.

7836. So as to enable them to make their own terms?—I think that follows.

7837. What effect has that had upon the price of coals in that neighbourhood, do you know?—It has had the effect of raising it very considerably, from 50 to 70 per cent.

7838. Mr. *Woods.*] In reply to one of the questions of the Chairman, you said that you thought the boys worked harder than the Legislature contemplated; I want to ask you what you meant by that; do you think that the Legislature has undertaken to fix the amount or degree or kinds of labour that boys should do?—No, I do not think so; but I mean that if the Legislature thought that boys could get a sufficient amount of education betwixt the ages of 10 and 12, and work at the same time, it was a mistake.

7839. You attached very great importance to the boys having a certain degree of education which you did not define, and you laid that down as the first necessary of their lives or conditions; did you mean that you would, by legislative enactment, cause the knowledge of reading and writing to take precedence of means of obtaining their livelihood?—I think that boys should be able to read and write before going down pits.

7840. I do not think you gave any reason, did you, why boys should not go down till they are 12 years of age?—The reason I gave was this, that they could not attend school after coming up out of the pits if they worked betwixt the ages of 10 and 12, because they would take so much longer time after leaving their work, in getting home, washing themselves, and getting ready for school, than boys working at other employments.

7841. Then you would propose that in all cases boys should learn to read and write before they began to labour?—Boys employed in pits.

7842. Why specially boys employed in pits?—For the reason I have stated, that it takes longer for such boys, after leaving their work, to get ready for going to school, than it takes for boys at any other trade.

7843. Is that a fact incident to mines?—That is my impression.

7844. Why, and how, is it so?—Because such a boy needs to change the whole of his clothes, and to wash himself more thoroughly than a boy working at other work, and he takes longer time to get himself dressed for going to school.

7845. *Chairman.*] The work also is harder than in many other occupations, is it not?—The work is hard, and the boy after being down all day, does not feel inclined to go to school I think; he likes rather to be in the open air after being under ground all day.

7846. Take a boy who has been employed in

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bird scaring, or in leading the plough; he is less tired at the end of a day's work than a pit boy, I presume?—I do not know that he is less tired, but he has been in the open air and in the daylight all day.

7847. And he is more willing, therefore, to go to the evening school?—I think he is more willing to go under cover than a pit boy.

7848. Mr. *Woods.*] That answer is given, I suppose, in virtue of your official position as an inspector of mines?—It is from what I have seen.

7849. Mr. *Greenall.*] What is your opinion as to the feeling of the men themselves, with reference to the employment of boys under 12?—I think they do not care much about it at all; I think they would consider it a great hardship for them to be kept out of the pit till they were 12, though many of their right thinking men think that that ought to be the rule.

7850. I gather from your evidence that with regard to the evils mentioned in the petition, and of which the men complain, the remedies are almost in the hands of the miners themselves?—They are entirely in the hands of the miners themselves.

7851. *Chairman.*] Did I rightly understand you that the objection on the part of the workmen to the employment of boys only applied to the employment of boys other than their own; and that you said that men were not allowed by the workmen's rules to put out more than a certain number of tons of coals if they hired boys?—No; that applies to anybody's boys.

7852. Mr. *Greenall.*] To pursue the questions which I asked you just now, supposing there was a prohibition of children working in mines until they were 12 years of age, do you think that their parents would send them to school between the ages of 10 and 12, or would they have them employed in other branches of labour?—That I cannot say; I think that many of them would send them to school, but the objections that the parents would make would be to the want of the wages, I think.

7853. But coming strictly back to the mines, you state it broadly as your opinion, as I understand you, that the evils which are complained of might be remedied in a very great measure by the workmen themselves; is that your opinion?—It is entirely a workman's question and not a master's question.

7854. *Chairman.*] You did not make it quite clear to me whether you were just now speaking of a rule of the trades union, as to the employment of boys?—I did not state that there was any trades union rule as to boys; it is not a union rule; it is an understanding; though you may call it a union rule. A man puts out so much work. Suppose, for instance, he puts out three tons a day for 5*s.*; he is able to put out more, and he could put out more easily; a strong young man could put out four tons easily; he does not do it, because he would be making a greater wage than his neighbours, and would be complained of if he did it; but he says, "I have a son 12 years of age or 14 years of age, who would be entitled by the same agreement to put out half a man's coals, and although this boy cannot work, still it would enable me to make 7*s.* 6*d.* a day instead of 5*s.*"

7855. Mr. *Woods.*] "Permit me to make," rather than "enable me to make," I presume?—Yes, "permit me to make," and he may say, "If I have not a boy of my own, if I can get a boy belonging to some other man, I can pay him a shilling a-day and take the balance myself."

7856. *Chairman.*] But there is no distinction in regard to the permission, so far as it is a permission, between employing one's own boy and other people's boys?—No, not so far as I know.

7857. Mr. *Woods.*] Is it to the whole of your district that these trade rules apply, or only to particular collieries?—That rule applies to the principal collieries; it applies to half the coals that come out of my district.

7858. In short, it is your description of this rule that uniformity of amount of work is imposed upon each man?—Precisely.

7859. And that if a man had any disposition to put out four tons (adopting your figures), he must not put out more than three?—He must not put out more than three.

7860. You have spoken a good deal of the permission to men to put out a certain quantity with boys of 12; is there any fixed time for such permission; is there any other figure that you can give us information about besides the age of 12?—I think that a boy of 17 is entitled to make a man's wage.

7861. Is there anything between 12 and 17, as far as you can tell us?—I really cannot say just now; it used to be that a boy of 15 was three-quarters of a man, and one of 12 years was half a man.

7862. Mr. *Greenall.*] But a very good workman, as I understand you, 17 years of age, cannot get more wages under this system than an indifferent workman can?—That is so.

7863. Do you think that a right state of things?—I think it a very bad state of things, but I do not think it can be altered.

7864. Mr. *Woods.*] That class of rules applies not only to a workman of 17, but to any age?—Yes, to any age.

7865. Mr. *Liddell.*] Am I right in supposing that a boy of 10 is a quarter of a man?—It used to be so considered.

7866. That one of 12½ is half a man; that one of 15 is three-quarters of a man; and that one of 17 is a whole man?—Yes.

7867. Mr. *Greenall.*] And in your district a man puts out three tons of coal a-day?—It varies; a man puts out three tons of coal a-day in many collieries.

Mr. ALEXANDER M'DONALD, re-called; and further Examined.

Mr. *A. M'Donald.*

7868. *Chairman.*] Do you assent, on behalf of the workmen, to that statement which Mr. Moore has just made as to the ages?—Yes.

7869. Mr. *Liddell.*] You are perfectly conversant with these arrangements, and perfectly competent to speak as to the correctness of the question which I have just put to Mr. Moore, and perhaps you would now explain to the Committee the origin of this arrangement?—I think the origin of the arrangement is from the older periods of service, about the beginning of the present century, when apprentices were taken into the collieries of Bo'ness and other collieries; and then in the west, in Lanarkshire, they took them in the same way; they were a quarter of a man from 10 to 12½; they were half a man from 12½ to

to 15; they were three-quarters of a man from 15 to 17; and at 17 they obtained a full man's rights. There is an understanding further between certain of the employers and the employed, which continues yet, that a boy at these respective ages pays so much into a fund; if he is what they call a neutral boy, in Ayrshire in particular, then so much is paid into a fund, which is held as a sick or an accident fund in the works; it goes into a common fund, which is held by the employer; and then, in case of accidents or death, or injuries, money goes out of that fund. But a singular thing is, that it is an understanding between the employer and the employed in a portion of Ayrshire, that they shall continue paying neutral boys at these rates of wages; and they have to get their certificates, duly certifying that they are of the ages to which I have referred; and some employers that I know will not allow the boys to get more than that.

7870. Mr. *Woods.*] What do you mean by their not allowing the boys to get more?—They do not allow them to get more coal.

7871. It is work done by piece work?—By piece work; those employers will not allow them to get more coal.

7872. You say that the employers, as I understand you, put that restriction upon them?—The employers in some of the collieries do.

7873. It seems to me strange that the owners of a colliery should be desirous of restricting the amount of coal that any workman, whether man or boy, should produce; can you give us a reason for that?—I cannot give you any reason for it, further than that it is an old custom; it exists in Lanarkshire.

7874. The inspector has told us that there is uniformity in the amount of work produced by the men; will you explain how it is that there is that uniformity of work?—It is not the result of the trades union, as was very properly said by the inspector; but it is a custom that has arisen in two particular counties, chiefly Lanarkshire and Ayrshire, and also Stirlingshire. It has arisen from these circumstances; I think that the men found that when a man put out 6 *s.* or 7 *s.* worth of work in a day, they were generally brought down to a certain level. It has had its origin in a line of defence; at least that is my impression, and the employers do not dispute it; at least in those two counties generally there seems to be an orthodox wage, so to speak, that the men should make.

7875. Are these men, of whom you are now speaking, paid by piece work?—By piece work; and the adoption of the restriction of labour to a certain amount seems to me to have been engendered as it were by a line of defence, because skilled workmen, men who can put out a larger amount than others, will, in a number of cases, just go down to the smaller rate of wages. Mr. *A. M'Donald.* 1 June 1866.

7876. I do not quite understand what you mean by skilled workmen going down to a smaller rate of wages?—If a man is able to put out four tons of coal or six tons of coal, and in that way to make 7 *s.* a day, in a short time he will find the employer reduce that 7 *s.* labour down to 4 *s.*, and then he has to work the large quantity for the small wage; whereas by putting out only the smaller quantity, he maintains the higher price.

7877. You say, in short, that the skilled workman by consenting to uniformity succeeds in maintaining the rate of wages for the whole community of colliers?—Yes, a higher rate of wages for the whole community of colliers.

7878. *Chairman.*] Without any loss to himself, inasmuch as he gets the same amount of wages for less work?—Such is the feeling that they have on the point, and such is the actual result.

7879. That if the skilled workman was allowed to do as much as he chose, and if there was no restriction, it would lead to a general depreciation of wages, from which the skilled workman would suffer as much as the unskilled workman?—That is the opinion of the workmen, and they adopt this plan which has been mentioned as a safeguard against it.

7880. This is an old custom, not one imposed upon the masters by the trades union, but a custom which has been in existence for many years, and one which has been in many cases adopted by the masters?—Not disputed by the masters.

7881. Mr. *Woods.*] Do you mean to say that this restriction of labour is an ancient custom of Scotland?—Yes.

7882. And that it is analogous to the other system, which is also an ancient custom?—Yes; it is like that custom with regard to the employment of boys. They are of the same birth; I cannot exactly fix the date; but they seem to have occurred about the commencement of the century, when the collier was made a freeman instead of a serf.

Ralph Moore, Esq., re-called; and further Examined.

7883. *Chairman.*] With regard to the general rule, have you any suggestion to offer about the general rules; look at the first rule, for instance?—The first rule is very good, I think. *R. Moore,* Esq.

7884. You have heard, perhaps, that some of the workmen object to the words "under ordinary circumstances," and would rather have the rule more absolute?—I do not know their objection. "Ordinary circumstances" have been defined to be ventilation at all times. If a fall was to take place in an air course, by which the ventilation would be delayed for a day, that would not come under "ordinary circumstances"; the ventilation could not be kept up then.

7885. Are you aware of there being cases in which there has been failure of justice, in your opinion, on account of the stress that has been laid, whether by magistrates or by juries, upon those words?—No. We have a different system in Scotland from the English practice in levying penalties. I have had no case myself wherein I have advised the penalties to be enforced for neglect of the first general rule.

7886. Then you are satisfied with the first general rule?—I am satisfied with the first general rule.

7887. You do not suffer much from fire-damp in your district, do you?—In Lanarkshire we have a great deal of fire-damp.

7888. I observe that in your last report there is only one death mentioned from fire-damp?—Only one.

7889. Does the health of the men suffer much from the black damp in your district?—Black

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damp is very injurious, and in some cases I think the workings are not so well ventilated as they might be; but still they are able to keep within the first general rule.

7890. The first general rule requires the noxious gas called "the black damp" to be made harmless; do you consider that that is complied with?—There is a good deal of latitude in the words "made harmless."

7891. Have you any test of the harmlessness of choke-damp?—No, I think we have no proper test.

7892. You would not test it by the burning of a candle, then?—If the candle would not burn at all then there could be no doubt about it.

7893. You heard what Mr. Dickinson said about that, perhaps?—I heard him quoting Dr. Smith's opinion, that one per cent. was sufficient to dim the light of a candle.

7894. Have you known any cases in which the penalty of the Act has been imposed for not purifying this choke-damp?—No, I do not know of any case in Scotland where there have been penalties imposed for neglect of the first general rule as to choke-damp.

7895. Do you consider that the health of the men suffers much from the prevalence of the damp in the mines where it exists?—I cannot say that their health suffers much; but there are some mines where there is choke-damp, which, no doubt, is injurious to the health of the men.

7896. Have you ever, as inspector, been called upon to visit a mine by reason of the prevalence of choke-damp?—Yes, I have.

7897. What report have you made in any such case?—I have never been able to make a report advising the Lord Advocate to prosecute for a penalty.

7898. Might it not have happened that between the time of the cause of complaint arising and your visit the mischief might have been removed?—No, I think not; because, on one occasion in particular, the men went down with me and stated that the circumstances were the same as they had been when the accident happened.

7899. I should have asked you this question before; you heard what Mr. Dickinson said as to the duties of inspectors; do you agree with that evidence?—Yes, I agree with that.

7900. It is not your practice, then, any more than it is his, to go down unless you have some information or complaint?—Yes, I do occasionally go down spontaneously, just with a view of seeing that the Act is properly carried out.

7901. Do you go down without having any particular reason (no matter what reason) to see whether the mine is properly regulated?—Just to see that the Act is properly carried out.

7902. You go down, in fact, sometimes because you have nothing else to do, and you think that you are bound to make the most of your time?—Yes, merely because I think I am bound to make the most of my time.

7903. General *Dunne.*] I understand you to say that you could not make the inspector responsible, but would throw the responsibility of the ventilation of mines upon the masters?—Decidedly; you could not make the inspector responsible without making him the master in reality.

7904. Nor without relieving the master of the responsibility?—Nor without relieving the master of the responsibility.

7905. Mr. *Greenall.*] Is your district a large one?—It is a pretty large one.

7906. Do you feel that you are able sufficiently to supervise it?—I am able sufficiently to comply with my instructions as to the amount of inspection necessary.

7907. You say, I think, that you have occasionally had complaints from the workmen?—Yes.

7908. And that you have gone down and seen if the things required remedy?—Yes.

7909. On other occasions you have gone down yourself, voluntarily?—Yes.

7910. In those visits which you have made voluntarily, did you ever find the same evils existing?—I have found something wanting, and got it put right.

7911. Nothing very material?—Nothing very material.

7912. Mr. *Liddell.*] There has been a strong desire expressed by some of the workmen that that class of workmen who are charged with superintending the workings, so as to ascertain that they are properly ventilated, and in a fit state for the men to enter, should be subjected to examination; I should like to know your opinion upon that point?—You refer, I presume, to what we call the firemen. That is quite a mechanical thing; it requires a steady man, and a man whom one can rely upon to go round the workings. There is no difficulty in detecting the fire-damp if a miner has had some little practice in it; and I do not see what good an examination would do. I do not see any need for an examination; and I do not know who would examine.

7913. Is it your opinion, speaking generally, that the class of men employed as firemen are competent for the performance of their duties?—I think they are; in my district they are. Reference has been made to their being able to detect fire-damp; sometimes I have to complain of them for allowing men to go into their places when there is fire-damp in them, which they were aware of; but that again is a breach of the special rules, and does not refer to your question, I think.

7914. And they are punishable for that breach of the special rules?—Yes.

7915. But in the meantime the lives of the workmen are in danger, not so much, I understand, from want of skill as from want of care?—Yes; you will find careless men now and again; it is not from want of skill, but it is from want of care on the part of the firemen that the accidents happen.

7916. My questions have been confined entirely to fire-damp up to this point. In regard to choke-damp, you do not call those men firemen, do you, who have to look after that?—Yes, we call them equally firemen.

7917. Are they competent always to decide whether the working places are sufficiently ventilated to secure the men against the choke-damp?—These firemen ascertain the presence of choke-damp or fire-damp, they do not manage the ventilation.

7918. But they ascertain the existence of noxious gases?—Yes.

7919. In the event of their detecting a noxious gas, they direct more complete ventilation to be carried out in that part of the mine, do they not?—Their duties are defined in the special rules: that they are not to allow any persons to enter those places until the ventilation be put right; but they report to the underground manager, who directs the ventilation.

7920. To sum up the whole, you do not consider

sider that a system of examination would secure the employment of persons better qualified to perform that duty than the class of people who are now employed?—I think not.

7921. Mr. *Woods.*] It is not fair to speak of the fireman having the management of the ventilation, I presume, as if nobody else had the management but the class of firemen?—The fireman has not the management of the ventilation; the underground manager has the management of the ventilation.

7922. What do the firemen do then if they have not the management of the ventilation?—The fireman goes round the pit in the morning, and ascertains if fire-damp or choke-damp exists in the working; that is his duty.

7923. Then, it is no part of his duty to provide the means which are to prevent the accumulation of fire-damp?—No.

7924. He has only to detect its presence?—Yes.

7925. Do you entertain the opinion that the present Mines Inspection Act has been beneficial in respect of accidents of all kinds in collieries?—There can be no doubt about that.

7926. Would it be fair to say that one of the great causes of its having been beneficial is, that it distributed the responsibility over all persons employed in and connected with the mines?—I think so, by means of the general and special rules.

7927. So that the humblest class of people employed in the mines began to have a legal responsibility, and to participate in the management of the mines in a way in which they had never done before?—I think that that is the great principle of the Act, in laying down the duties of the various classes of people who work in the mines.

7928. And in that it has been a success?—In that it has been a complete success, and will continue to be more successful.

7929. In its present state, even, it will continue to be so, you think?—It will continue to be so in the adoption, perhaps, of other special rules. You find good and bad mines everywhere in my district; but as the badly-managed ones come up to a higher level as they come up to the level of the better managed mines, we shall then be able to get other special rules, which will still better define the duties of the men, and in that way we shall improve the general condition of mines.

7930. Then it is your opinion that even the present Act contains, within itself, provisions for framing better management than now exists in the average class of mines?—No doubt of it.

7931. *Chairman.*] You wrote a book on the ventilation of mines, did you not?—About seven years ago I wrote a small work for the use of over men.

7932. And you conclude that book by saying, "I am satisfied, if due attention be paid to the suggestions above noted, and especially to sufficient area of air courses, that mines in Scotland would be adequately ventilated, and explosions be rendered almost impossible." Have your suggestions been generally brought to the notice of the managers and owners of mines in Scotland?—In my own district I have advocated those ideas, and given suggestions.

7933. Have you found your suggestions attended to?—I think that whenever they have been attended to, they have been followed with good results.

7934. I did not mean to ask whether the owners of mines were legally bound to follow your suggestions, but where they have done so, the result has met your expectation, as I understand you?—I think so.

7935. For instance, you say that "no air course should be less than 16 feet area at any part"; is that generally complied with?—In well-ventilated collieries it is.

7936. Should you say that those collieries in which it is not complied with are not well ventilated?—I should say so.

7937. Should you say that they are not ventilated up to the point imposed upon collieries by the first general rule?—No, I should not say that.

7938. What would be the average size of air courses of the mines in your district?—They vary very much; in their seams sometimes you do not get six feet; I hope, however, by-and-bye to get such a rule introduced into the special rules, that there shall be a minimum size of air course, and that, I think, will be the greatest benefit to ventilation.

7939. What do you put that minimum at?—I should put the minimum at nine square feet for thin mines, and certainly not less than 16 feet for mines of 4½ feet thickness.

7940. Compared with that standard, the air courses in the mines in your district are very defective?—I presume there are badly ventilated mines in my district, where the air courses are the cause of the evil.

7941. But you have not found any mines sufficiently badly ventilated to justify you in enforcing the penalty?—No.

7942. Mr. *Woods.*] This is rather one of the means of ventilation than ventilation itself, is it not?—Yes.

7943. *Chairman.*] Do you find a general disposition to conform to your suggestions?—Upon the whole I do.

7944. And to remedy the grievances?—Yes. There are still some very badly ventilated mines in my district.

7945. How is it that if they are badly ventilated, you have not attempted to enforce the Act?—In an old mine it would require to do the whole thing over again; but in new pits, I make a point of endeavouring to advise the parties to set out the pits in better order.

7946. But you make great allowance for the difficulties of old pits?—You must do so; in fact, you can only move by suggestion, and you could not get men to spend an immense deal of money upon a pit which would only go one year more, or a few years more, perhaps.

7947. Another of your suggestions is, that "the up-cast shaft should be about 20 feet area"?—Yes.

7948. Would most of the upcast shafts in your district come up to that standard?—Yes, but you will observe that that is in connection with the air courses; there would be no use in the up-cast shaft being large unless you have large air courses to come up to it.

7949. You rely more upon the large size of the down-cast shaft; is that so?—No, the up-cast shaft is the principal shaft; you must have the up-cast shaft and the air courses go together. Unless you have large lateral air courses it does not signify what you may do as to the shaft.

7950. But you say in your suggestion, "The down-cast shaft may be any size larger than the up-cast, on the principle that the up-cast is where

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the power of propulsion or extraction is at work, and that all the openings or channels leading to it must be larger, so that it be freely supplied with air"?—Yes.

7951. Then you do attach importance to the size of the down-cast shaft?—It must be larger than the up-cast.

7952. Is the regulation of the Act of 1862, requiring a double shaft, universally complied with?—It is not complied with, in all instances yet, but it is very generally complied with.

7953. But if it is not complied with, how is it that the owners of mines, who do not comply with it, are not brought under the operation of the law?—It rests with the Lord Advocate; I have intimated to the Lord Advocate, when such a thing occurs, that the Act has not been complied with.

7954. And what action has the Lord Advocate taken upon that?—I do not know.

7955. Do not you inquire when you have called the attention of the Lord Advocate to any case, what he does upon it?—When a thing gets into the Lord Advocate's hands, it gets out of mine, unless he calls upon me to do something.

7956. Would you not think it right, for your own guidance, to know what becomes of the case, in order to know the opinion of the Lord Advocate upon such cases?—I do not know that I have the right to ask the Lord Advocate.

7957. I do not ask whether you have the right to ask the Lord Advocate, but you have a right to take notice whether the Lord Advocate acts upon your suggestion, I presume, in order to judge whether it is worth while to trouble him with any more complaints of the same nature?—I have again and again given intimation to him in the same case.

7958. It is not for me to teach you your duty as inspector, but I should have thought that, as inspector, you would report to the Home Secretary that you had called the attention of the Lord Advocate to such cases, and that the Lord Advocate had done nothing with them?—I rather think that I have done my duty in calling the attention of the Lord Advocate to the subject.

7959. But you do not think it any part of your duty to say in your report to the Home Secretary, "I have noticed a want of compliance with the Act of 1862; I have called the attention of the Lord Advocate to it, and the Lord Advocate has done nothing in the matter"?—I rather think that is beyond my powers.

7960. You are now stating it as part of your evidence that it is so?—Yes, I give that as my opinion.

7961. I see that in your report for 1864 you state, in reference to the fatal explosion which is mentioned in the report, "It occurred at Newlands Colliery by two men going into the face of a place which was driven 10 yards up the 'vees' of a hitch, to 'chap' or signal to some workmen on the opposite side, who were driving a mine towards it. The 'place' was neither fenced off, in terms of the second general rule, nor ventilated in terms of the first, but contained some fire-damp which exploded at the light of one of the men, burned both, one fatally, the other slightly." That was a case of defective compliance with the second general rule, owing to the place not being fenced off, the men were not warned of what might be the condition of the air?—That was a case where the first and second general rules seemed to clash; there seemed to be some doubt about the case.

7962. You go on to say, "In my report for 1863 I took occasion to notice what has been a prolific source of explosions, the very dangerous practice of driving fiery bords without brattice, and leaving them unventilated while standing up-stoop"; what do you mean by up-stoop?—I think I have a sketch here to show it. (*The Witness produced a sketch.*) "Up-stoop" means driven up 15 yards, perhaps waiting until an end come across upon it. (*The Witness explained the sketch to the Committee.*)

7963. Then the up-stoop should either be ventilated under the first rule, or fenced off under the second?—Yes; but I think that the second rule does not apply to that at all, because that is a place in actual progress; in actual course of extension.

7964. You go on in your report to say this: "I remarked that air should be conveyed into these places to ventilate them, in terms of the first general rule, while they were driving up, and also to keep them clear while standing up-stoop"; you mean while waiting for further prosecution?—Yes.

7965. "I am glad to state that the Lord Advocate has caused an intimation to be made to the coal masters in this district, that Crown counsel will in future act upon that construction of the statute." You brought this case before the notice of the Lord Advocate that you might institute a prosecution, did not you?—I brought that case before the Lord Advocate for the purpose of having his opinion as to whether a place standing up-stoop was a place not in actual course of extension, or was a place in actual course of extension.

7966. Sir *Philip Egerton*.] That is a question as to the interpretation of the second general rule?—Yes. I hold that a place temporarily standing is a place in actual course of extension, and that the second general rule applies only to places or districts which have been standing for months, or which are not intended to be occupied for some time.

7967. *Chairman*.] But, one way or the other, it was a clear violation of the law, was it not; giving the benefit of the alternative to the owner or the manager of the mine. Still it was a clear violation of the law, and one by which a man lost his life?—Yes, it was a violation of one or other of those general rules.

7968. Why did you not recommend that legal proceedings should be taken in such a case as that?—I did recommend it.

7969. Did you make such a report to the Lord Advocate as you would have made with the view of inducing him to take proceedings, or merely a report, asking his opinion as to the construction of the Act?—In that case which is referred to there I made a report, giving him my opinion as to the way in which the Act was violated; and he, of course, made his own inquiries of the procurator fiscal, but took no steps.

7970. You made that sort of report which the Lord Advocate might have made the basis, if he chose, of criminal proceedings under the Act?—If it had been myself I should have done so.

7971. Of course I do not ask you to express an opinion upon the duty of the Lord Advocate; but you put it in his own power to do so, if he had thought proper; you did not write to him merely as to the construction of the Act, but you stated the

the facts, and your view of them?—Precisely so.

7972. Does that suggest to you any alteration in the language of the second rule; would you propose to define more accurately what is meant by a place "in actual course of working and extension"?—I think that since the Lord Advocate has made that announcement in my district which is mentioned in my report, it is pretty generally the case that that construction is taken, and the places are ventilated in terms of the first general rule.

7973. You have no definition, however, of actual extensions?—I think the expression of that opinion by the Lord Advocate has tended, in my district, to make them brattice up places, and carry the air up to the face of places so standing, very generally; and as that is the only doubtful point about it, I do not think there is any reason, so far as regards my own district, to make any alteration in that rule.

7974. Do you think that if it had been properly fenced off any accident would have occurred?—Yes; I think it should not have been fenced off.

7975. Would you in every case, where there is a working which has not been permanently discontinued, carry the ventilation up to it?—Yes, certainly.

7976. I mean, although it might be discontinued for months?—"Discontinued for months" might imply that it was not to be resumed; that is too long a time, and I would not say months; but I would say that any place should be discontinued a month or two months before it is held to be a disused place.

7977. Would you say that any place where coal is not worked out, or which may be used as a means of access to a place where coal is to be worked out, is not permanently discontinued?—That is where the whole question lies; when does a place cease to be a working place; does it cease to be a working place when it stands for a month? Well, I think it does not cease to be a working place if it stands for a month waiting for an end coming over; but it can be so construed, that it is a standing place, and that is the difficulty.

7978. There is a difficulty, and you cannot help us out of it by any suggestion?—No.

7979. You must leave that to the lawyers?—Yes.

7980. General *Dunne.*] Would you give the power to the inspector to define the size of the air course as necessary for ventilation?—No.

7981. I mean the minimum size?—No, I would not say that the inspector should define it; but I would have it in the special rules; I would not have the inspector take any more responsibility upon himself; but I would in the special rules specify the minimum size.

7982. If there was a minimum in the special rules, of course he could enforce it then?—Yes, he could enforce it.

7983. Mr. *Liddell.*] You have given a great deal of attention to the subject of ventilation have you not, and you have written a work upon it?—Yes.

7984. Will you explain to me precisely what the operation is, of what I may call the natural forces in the ventilation of a mine. I will explain what I mean: a shaft is sunk, we will say, 2,000 feet; now I want you to be kind enough to explain to me exactly what are the natural forces which cause the air to reach the bottom of that great depth; is it the weight of the atmosphere?—The weight of the atmosphere. The weight of the column of air and the heat which it would get from the naturally increased temperature of the air.

7985. Then the column of air reaches the bottom?—Yes, there are two columns of air.

7986. I will deal with the up-cast shaft presently?—You must take them together I am afraid. There are two columns of air 2,000 feet long, and they are a perfect balance (I am speaking now of natural ventilation). The heat of the air as it descends gets greater. A movement takes place, and the air on the other side, whenever the motion takes place, becomes lighter, because of the expansion due to the increased heat; and then there is a continued supply of cold air going down and of heated air coming up.

7987. Natural forces would supply that result in the case of a single shaft?—You must have a diaphragm: a bratticed shaft.

7988. Now we get, we will suppose, to the lower part, to the galleries; there the air is drawn by means of furnaces, is it not?—You get to the galleries leading into the faces; you must have a double gallery; the air must go in one circuit round the faces; it must go round by the faces until the circuit gets completed. It descends the downcast shaft, goes round the workings, comes to the upcast shaft, and comes up there.

7989. Sir *Philip Egerton.*] The current is directed underground by means of doors?—Yes. When the galleries are very long, there is a great deal of friction in the passage of that air, and natural ventilation will not then be sufficient; you must have a furnace in order to heat the air to a higher temperature than the natural heat of the strata will be; and then, the greater the difference in the weight, owing to the temperature of the air in the up-cast and down-cast, the greater the current.

7990. Mr. *Woods.*] Then it comes to this, that there are two shafts, we will suppose, sunk at one part of the mine, and that they are of equal depth; you light a fire at the bottom of one of them, and that shaft becomes warmed from the bottom to the top; the air confined in that shaft is the lighter of the two, and consequently the air begins to descend the down-cast shaft by reason of its greater total weight, and ascends the up-cast shaft, that increase of temperature in the up-cast having been obtained by a fire?—Yes.

7991. That provides for the ventilation so far?—Yes.

7992. Then, the next question is, the mode of conducting the air round the mines?—Yes.

7993. As the workings of the mines are extending from day to day, the circuit round is increased in length?—Yes.

7994. Consequently, doorways often have to be stopped; those doorways which last week were of use are this week of no use, it may be?—Yes.

7995. Those places are built up generally with brick and mortar in the explosive mines, I believe?—Yes, in some of them.

7996. If those places are bricked up negligently, the air will leak?—Yes.

7997. Consequently, there may be an immense current of air down the down-cast and up the up-cast which never reaches the extremity of the colliery?—Yes.

7998. Then it becomes a question of the wise

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and good management of the colliery, rather than the height of the shaft or the size of the air courses, does it not?—Yes.

7999. You have gone so far in your evidence as to say that you recommend the minimum size of air courses to be fixed?—Yes.

8000. Is it not the fact, that if one colliery had its pits 500 yards deep, and another had its 200 yards deep, the rush of air (other things being equal) would be much greater in the deeper colliery than in the more shallow one?—Yes.

8001. The rush of air would be double in the one colliery what it was in the other colliery?—Yes, you would have more air.

8002. Then the fixing of the minimum size is not of universal application?—If the manager had not air-courses as large as that minimum, he could not expect ventilation at all.

8003. It amounts to this, does it not, that if one colliery was double the depth of another from the surface of the ground (all the other things being equal), half the size of air-courses would do in the one case for what would do in the other?—Yes.

8004. Then, in point of fact, any arbitrary rule as to the size of the air-courses ought not to be taken *per se* without reference to the other circumstances of the colliery?—Except that you must have air-courses of some kind, and if they are less than that minimum, I say that they are of no use at all.

8005. You know, of course, that when a gentleman has written a book, we read it and criticise it; was this a book written before you were inspector?—Yes.

8006. My question is directed to this, that an arbitrary rule imposed by Act of Parliament would be undesirable?—I do not propose to put such a rule in an Act of Parliament. I say that it should be in the special rules adopted for each colliery.

8007. You have proposed certain minimum measurements for air-courses, and recommended their adoption; let me ask this question: is not successful ventilation the true test of goodness?—I do not quite comprehend the question.

8008. We will alter the form of it, then. If you found a colliery well ventilated, would you seek to impose upon that colliery any special rules as to the size of the air-courses?—If I found a colliery well ventilated, I would be pretty sure that the air-courses were of that size.

8009. Of that particular size that you have recommended?—Not less.

8010. General *Dunne.*] Of course, the larger the air-courses the better the ventilation?—Yes.

8011. Mr. *Woods.*] Large air-courses are material to successful ventilation, in your opinion?—Yes.

8012. And stoppings and other modes of neglecting the management of a mine from day to day are very material questions?—Very material. You may have any amount of current going down a pit, as has been remarked, and yet not going through the workings.

8013. It is quite possible to conceive such a thing as a large current of air up the shaft and down the shaft in a badly-managed colliery, and no air at all in the mine?—Yes.

8014. *Chairman.*] Did you hear what Mr. Dickinson said about using the up-cast shaft for the conveyance of workmen?—Yes.

8015. Do you agree with what he said?—We have never got that length in Scotland; we have never got so much heat in the shaft, and I do not think that there is any object in restricting men from riding anywhere, either in the up-cast or the down-cast shaft.

8016. In your district you have not seen any inconvenience or danger arising from it?—No, I think not.

8017. And you would not suggest any restriction on the use of the up-cast shaft for the conveyance of the men?—No, I think not.

8018. General *Dunne.*] You would give that answer as applicable only to colleries in your own district?—Yes.

8019. If in Mr. Dickinson's district he found that the heat of the up-cast shaft was too great for human life or human comfort, would you object to that rule?—If I found the heat in an up-cast shaft in my district to be so great as to be inconvenient to the workmen, I would suggest to the manager that the men should not ride in it.

8020. In an up-cast shaft which goes to a considerable length, is the heat greater or less; in other words, is it more difficult to heat the long shaft?—It is more easy to heat the long shaft.

8021. Mr. *Foster.*] You would not forbid, I suppose, the up-cast shaft being used for the purposes of ascent and descent of the men merely because the heat, in some instances, might be rather greater than was desirable?—If the heat was very great in an up-cast shaft I do not think that men should ride in it.

8022. But you would not compulsorily forbid their doing so merely because, in a few instances, the heat might be objectionable, would you?—No, I think it might be left to the discretion of the manager.

8023. You would not wish any general rule or law laid down upon that point?—No.

8024. Mr. *Liddell.*] No general law would be applicable, I imagine, to all mines, inasmuch as the circumstances differ so much?—I do not think so. I think it would be a hardship in some cases.

8025. But would it not be absolutely inoperative in some cases; might not the circumstances of one mine vary so much from those of another that the same general rule would be inapplicable to both?—It might be so.

8026. The depths of the two shafts, for instance, might be very different?—Yes, it might be that the up-cast shaft was working a seam at a lower level, and that the men could not conveniently come out at any other shaft than the up-cast shaft.

8027. Mr. *Woods.*] That inconvenience might arise from the fact that they were at a much greater distance in their work from the down-cast shaft than from the up-cast shaft?—Yes. Supposing two colliery masters to agree that the up-cast shaft should be in one, and the down-cast in the other, it would not be fair to say that the men must, in that case, all ride in the down-cast.

8028. The going to and from their work underground is regarded by the men, when they have a great distance to go, as a very severe part of their labour, and as a very serious inconvenience?—In some cases.

8029. If they could not get up the nearest shaft, that happening to be the upcast shaft, it would be an inconvenience to the men generally?—Yes, and the inconvenience would be still greater in the case which I put just now, of the two

two persons agreeing between themselves that the up-cast shaft shall be in one and the down-cast shaft in another.

8030. The up-cast shaft does not generally contain the pumping tackle, does it?—No.

8031. And the up-cast shaft is generally the one in which most winding goes on?—I do not know about that.

8032. Have you ever felt any inconvenience yourself worth calling a practical grievance in going up and down the up-cast shaft?—I have not.

8033. *Chairman.*] Will you turn to the list of accidents given in your last Report. The first we have already disposed of, namely, explosion of fire-damp. The next case is that of a man "waiting for a loaded hutch at the collier's wall-face in splint coal." Have you anything to say upon that?—That was a drawer.

8034. Was that the result of carelessness or of any neglect of the rules?—There was no neglect on the part of the man himself. It was a drawer who was going into a collier's wall-face for a hutch of coals, and while he was in there the coal came down and killed him; that was an instance where, if there was any neglect at all, it was that of the collier, and not of the man himself.

8035. The next case is thus given: "20 square yards of Pyotsham coal fell unexpectedly on him while working at it." I suppose you cannot guard against that, can you?—No; accidents frequently happen from that. There are two seams close together, we will suppose, one being about four feet, and the other about the same thickness; they work the first one away 20 or 50 or 100 yards, it may be, in advance; the second is cut down by a different set of men, and of course, where they are working under the coal that is going to fall, unless they are very careful in setting props, the coal comes down unexpectedly; it did so in this instance, and killed the man.

8036. Was there any defect in the supply of props to support the roof in this case?—No.

8037. Is that part of the rules generally well attended to?—Yes; the special rules generally in use in Scotland say that the pit-wood is to be kept on the surface, and the man has to take the pit-wood and carry it to the face, and that is generally complied with.

8038. This accident happened from the neglect of the workmen to prop up the roof?—Yes.

8039. Supposing that the men do not bring down sufficient wood, are they liable to be fined and punished; does the viewer of the mine see that the workman is supplied with sufficient wood to prop up his place?—I think they rely upon the men themselves.

8040. There is nobody, then, whose business it is to say to the workman, "You have not brought sufficient wood down"?—Yes; they are obliged by the special rules to put up such props as the underground overman thinks proper; but I do not think that the underground overman pays sufficient attention to that part of his duty.

8041. Then to a certain extent that accident arose from want of sufficient supervision over the workmen?—To that extent it did; the men are obliged by the special rules to protect themselves; but I think that the overmen might take more care than they do about that, and that it would be attended with benefit if they were to do so.

8042. The next accident is thus described, "Crushed by cage." Have you any observation to make upon that case?—No.

8043. The next is "Fell down incline." Have you anything to say on that?—It was a very steep mine; it dipped at the rate of three feet to the yard. The man was on a carriage, going down the incline, and something caught the rope, and the chain broke, and down it ran, and he was killed; I could not say that any blame was to be attached to anybody in that case.

8044. You think that there was no violation of any general or special rule?—No, I do not think there was any.

8045. And you think that there was nothing in the case to require any new special rule, to prevent such an accident?—No, it was a special case.

8046. The next accident is, "Fall of main coal, while taking out pillars"?—That was something like the other case.

8047. The next is, "Fell out of kettle, while ascending pit." What do you mean by the kettle; what is the difference between a kettle and a cage?—The difference is that the cage is guided by a conductor, whereas the kettle swings. The kettle is merely attached to the end of a rope, and goes backwards and forwards in the pit; whereas the cage is guided. I could say nothing about that case.

8048. Is it right that workmen should be allowed to go down in a kettle?—They must do so; there was no objection to it in that instance, I think.

8049. Is there no special rule in your district to prevent it?—No.

8050. Is it a common thing for them to go down in kettles?—Cages are nearly universal in my district; it is very uncommon for them to use kettles, unless in sinking pits, where they cannot do anything else.

8051. But there is no special rule against it, as I understand you?—No.

8052. Should you think it right to make a special rule against it?—No, I think not.

8053. The next case is, "Fall of coal in Kiltongue seam"?—The same observation applies there.

8054. The next case: "Fell in before waggons"?—It was on the surface; that was a little boy who fell off before the waggons.

8055. The next case is, "Fall of roof in splint coal." Have you anything special to say upon that case?—No.

8056. The next two cases are, "Fall at face of head coal," and "Fall at face, splint coal;" what is the difference between splint coal and head coal?—In those cases I put in the names of the seams because the roads vary. The same observation applies there.

8057. When you say that the same observation applies, you mean the want of sufficient propping, I suppose?—Want of sufficient care on the part of the workmen themselves.

8058. But the accidents happened partly from want of sufficient supervision also, as I understand you?—I think that if there were a better supervision there would be fewer accidents.

8059. There are two more cases, "Fall at face, splint coal;" and then the next case is, "Fall of 'brushing' (roof) at face;" what do you mean by the brushing?—The brushing is where the coal is worked by the long wall; they wanted to cut something out of the roof to give height, and the stones fell on the man as he was taking them down.

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8060. There is nothing in that case, except want of skill or care, I presume?—No, nothing except want of skill or care.

8061. The next case is "Fall of coal at face;" that would be the same, I suppose?—Yes.

8062. Then comes this case, "A hutch from a higher level ran over him while he was going out with a loaded hutch;" can you say anything about that case?—He was going down hill with a loaded hutch, and another hutch ran away from a man above him; that hutch came against his hutch, and he was killed thereby.

8063. Was there any violation of any rule in that case?—There was no violation of any rule in the Act, but it was a little careless, and I recommended the managers to alter the incline a little, which thing they did.

8064. On whose part was it careless?—It was careless on the part of the overman; the road was not a good one; I suggested an alteration, and it was made better; but there was nothing which we could lay hold of.

8065. You think that there was a certain amount of clumsiness, but not enough to justify proceedings?—No; it was an error of judgment on the part of the overman.

8066. The next case is this: "Fall of coal (working with his father);" that, I presume, is nothing special?—No; that is just one of those cases where the overman, by coming round and seeing that all was safe, could effect an improvement. This boy, working with his father, of course could not be expected to look to the state of the roof; he could not understand it.

8067. Then these accidents suggest to you, as I understand, the necessity of more frequent and better inspection by the overman?—I think so.

8068. Have you ever made that suggestion to the owners of mines?—Constantly.

8069. With any effect?—Well, the accidents from that cause are decreasing slightly.

8070. What has been the decrease in accidents during the four years you have been inspector. I see that you had in your district 39 deaths from accidents in 1864?—There were 35 deaths from falls in 1862, and only 25 in 1864. I think that some of that improvement is to be attributed to the overmen looking better after these things, and to the fact that the men themselves have been more attentive.

8071. The great danger in your district is in the falls?—The falls are put at more than 60 per cent. of the whole mortality.

8072. I see that in your report you say, "With one exception, these have all occurred through injuries received close to the colliers' working places, and embraced by the clause in the special rules, which states that the colliers are bound to prop and secure the roof under which they have occasion to be in their operations of working and filling their coals. In my last report I pointed out that the responsibility of supporting the roof in the colliers' working places was freely acknowledged and acted upon by the owners of collieries in the north of England, and that the death rate was lower there than in this district. I beg again to direct the attention of the owners of collieries in this district to the subject, and hope that something may be done for the safety of persons, at least, who require to come within the colliers' working limits, but who cannot be held bound to support the roof." You would wish to put in that as part of your evidence, I presume?—Yes.

8073. There is one case of accident thus described: "Fell off a vertical ladder, while descending a pit 19 fathoms deep." Is it lawful, by the special rules, to have a vertical ladder?—There is no special rule against it.

8074. Do you think that it would be right to make a special rule against it?—I do not think so.

8075. You see no objection to the use of vertical ladders, then?—No. That is the first fatal accident of that kind that has happened in that place for 20 years.

8076. Are you aware that, in the report of the Royal Commission as to mines, it was recommended that vertical ladders should not be allowed?—That was on account of the fatigue which it caused the men to ascend.

8077. Sir *Philip Egerton.*] This is the recommendation of the Commissioners: "That, in order to avoid the evils consequent on climbing ladders, mechanical means should be provided to convey the men to and from the surface when the mines are of great depth?—Yes.

8078. *Chairman.*] Do you think it right that perfectly upright ladders should be allowed?—I think so; I see no objection to it.

8079. Have you not known of any other accident of that nature?—Yes, I know another accident; not a fatal accident, but one where a boy was injured.

8080. One accident was from "Falling down pit from a mouthing"?—Yes; that is a frequent source of accident.

8081. By "a mouthing" you mean an opening of the seams, I suppose, into a shaft?—Yes; where two or three seams are worked into one shaft.

8082. You say that that is a frequent cause of accident; I only see one accident, however, from that cause mentioned in your last report?—Yes.

8083. Is there any provision in your special rules for fencing the opening of the mouthing?—No; but I always have succeeded in getting the managers to put up gates at these mouthings.

8084. Would you suggest that that danger should be provided against by a special rule?—I think there ought to be a special rule to guard against it.

8085. One case of accident is thus described: "Crushed by cage while attempting to cross pit-bottom, instead of going by road." That may happen to anybody, may it not; I suppose that was the carelessness of the workman?—It was the carelessness of the man himself.

8086. One case was this: "Fall of roof while taking out stoops." Will you explain the meaning of that?—Taking out the coal which has been left.

8087. In any case, that is dangerous work, is it not?—Anyhow, that is dangerous work.

8088. Do you think that special precautions ought to be taken to provide against that danger?—Yes; and I think that there are better precautions taken for the workmen while stooping than at any other time.

8089. The underground overman has generally to see that it is done properly, has he not?—There is generally one of the men engaged solely to see to the safety of the other men, otherwise we should have a great many accidents.

8090. Did this accident happen for the want of that superintendence, do you think?—I recollect that case; it was a young boy who was killed; his father had just taken out a pillar and removed to another place.

8091. The

8091. The pillar and the stoop are the same thing, are they not?—Yes, they are the same thing. The father, as I say, had just taken it out, and gone to another place, and the boy went there to fill coal, and while he was in the act of doing so it came down.

8092. Should you say that that work is generally done with proper precaution?—Yes, I think that in most of the collieries in my district, where stoops or pillars are taken out, there are men who specially look after the roof during the time that the men are busy taking out the coals.

8093. Have you any further alteration in general or special rules to suggest, with a view to the prevention of accidents?—The special rules can be altered at any time. Any suggestion that I might make now as to the special rules, I could make to the coal owners themselves. That is a subject that does not need to be legislated upon, if I may say so, with all respect to the Committee.

8094. Have you got with you the special rules in force in your district?—Yes; we have two sets of rules in force in my district.

8095. You might, as you say, make suggestions to the owners themselves; but it does not follow that your suggestions will be attended to, does it?—Then I could arbitrate.

8096. If you make a suggestion as to the want of machinery in a mine, you could arbitrate?—Yes, I am doing so just now.

8097. Will you tell us the point?—The point on which I am now engaged in arbitration is at Clackmannan Colliery, and it is not decided yet. In the morning I want a fireman to go through the pit before the men enter, to see that there is no choke-damp (for there is no fire-damp there) or other noxious gas, and that the working faces are apparently safe to be entered. The proprietor says, "No, I will not do so; there is no necessity for it;" and accordingly I am arbitrating it just now.

8098. The result of your prevailing in the arbitration would be to introduce a special rule requiring that?—Yes, decidedly.

8099. The special rules in your district, then, do not require that a fireman should go round the workings every morning?—That is the opinion of that colliery, and of many others.

8100. What do you mean by saying that it is the opinion of that colliery?—That it is the opinion of the owners of that colliery, and many others.

8101. Is there any special rule applicable to the subject?—No, there is no rule just now binding him to do it, and I want to make one.

8102. It is quite clear that there is no such rule now?—Yes, it is quite clear that there is no such rule just now.

8103. You merely act under the clause which enables you to point out any difficulty, and if the matter is not attended to to arbitrate?—Yes.

8104. Have you any other point which you wish to bring before the Committee?—No.

8105. Mr. *Liddell.*] Have many cases occurred, within your experience, where you have suggested either an alteration or an addition to the rules in which you have been, by the unwillingness of the owner to accept your suggestion, forced to go to arbitration?—This is only the second case. In the first case of arbitration, which happened about 12 months ago, it was on the same question. I wanted a man to go round the faces in the morning, before the colliers returned, to see that all was right, and the arbitrator awarded in my favour, and I got that special rule introduced.

8106. What is the nature of the objection; why does the owner object to letting the firemen go round?—I think partly to avoid responsibility.

8107. But surely the responsibility is greater if the fireman does not go round, because if an accident was to occur, and it was shown before the jury that it had arisen from neglect in sending a man round, that fact would tell rather hardly against the owner, would it not?—I do not know. The first rule is, that before going to work colliers shall satisfy themselves of the safety of the working places.

8108. You are now quoting from the special rules?—Yes; I am now quoting from the special rules, which I want altered. I think the colliers would not be satisfied with that.

8109. Do you think that colliers would be satisfied with receiving a report from a man, that he had been round the places in the morning and found them safe?—We provide for that in this way: we say that besides the examination which the fireman makes, the collier must satisfy himself also; because, of course, there may be an alteration between the visit of the fireman and the collier going to the place.

8110. If this duty is entrusted to the fireman in this particular case to which you have referred, would that be sufficient to satisfy the colliers themselves?—I think that if the fireman had been in a place and said it was all right, they would believe him.

8111. Mr. *Greenall.*] Did you make that suggestion upon your own thought, or did the colliers suggest it to you?—I made it upon my own thought.

8112. When you made the suggestion, what was the answer that you received?—The answer I received was, "We do not see any reason for making an alteration in the special rules;" and I said, "Well, if you do not, I must arbitrate it," and so it is now pending.

8113. Mr. *Foster.*] Is the case that you are now speaking of peculiar to one colliery, and would you say that the absence of necessity for firemen visiting the working places does not apply to the generality of the collieries in your district?—The rules which I object to are in use throughout Fife, from which about a fifth portion of the coal put out in any district comes.

8114. And in the other four-fifths of the district, what is the state of the case?—In one half of my district, the rules which I wish to introduce are already in operation, but in the other half only partially so. In Fife, which is the district I am now speaking of, the special rules are all the same as they are in this colliery that I object to; but I must begin at once, and if I do not succeed at this one, I must go on with the rest.

8115. What you would wish to do then is, to bring the special rules of Fife in conformity with the special rules of Lanarkshire and other districts?—Yes.

8116. Mr. *Liddell.*] I presume you are acting in this matter with the sanction of the Secretary of State?—I cannot act without it.

8117. Mr. *Woods.*] There is a fair and complete provision made in the Act for providing the necessary special rules, is there not?—There is complete provision made; but there is a difficulty

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caused by the mode of selecting the arbitrator. The coal master gives a list of five persons who are deemed eligible for arbitrators, and Sir George Grey must select one of those five; I I think it would be fairer if Sir George Grey selected one, and the coal master another, because generally an inspector has not much chance if he has to select from the five persons so named.

8118. But of course you have regard to the fact, that these special rules are for prescribing the mode in which the business of the owner of the mine is to be carried on?—They are regulations for the safety of the miners; they are "for the conduct and guidance of the persons acting in the management of such coal mines, colliery, or iron-stone mine, and of all persons employed in or about the same, as under the particular state and circumstances of such coal mine, colliery, or iron-stone mine, may appear best calculated to prevent dangerous accidents."

8119. From what are you now reading?—That is in the Act 23 & 24 Victoria, cap. 151, the 11th clause.

8120. "For the conduct and guidance of the persons acting in the management of such coal mine," are the words?—Yes.

8121. Of course the management of a mine is really a question of expense?—Yes; but that we have not to enter into.

8122. No, I do not suppose you have; but it does affect the expense more or less of the management?—There can be no doubt that improved management sometimes adds to the expense.

8123. The special rules do affect the expense, then?—They may; but what we have to look to is what "may appear best calculated to prevent dangerous accidents."

8124. If they affect the expense, you would recognise the fact, of course, that the owner of the mine should be fairly and duly consulted in the management of the mine, or his opinion rather should be consulted?—No doubt.

8125. Then, on any question of arbitration you would propose to give him what you might deem a sufficient voice in the choice of the arbitrators, would you not?—I think that if he were to choose one and Sir George Grey the other, and then to let them choose the umpire between them, that would be fair; but if you give the coalowner the privilege of giving a list of five, from whom Sir George Grey must select one, he is apt to be biased.

8126. The 13th clause says, "If such owner within 20 days object to any such alteration or additions or rules, by way of substitution proposed as aforesaid, he may, within 14 days after he has so objected, nominate five or more practical mining engineers, or other competent persons of experience, and who shall not be interested in or employed in the management of such mine or colliery." The owner of the mine selects the five, the Secretary of State must take one of those five?—Yes.

8127. Then, in case he does not name them, "two such mining engineers, or other competent persons as aforesaid, shall be appointed arbitrators, one of whom shall be named by such owner, and the other by the inspector of the district"?—That is to say, provided the first arrangement be not carried out.

8128. Have you ever had an arbitration in which you were successful?—Yes; about 12 months ago I arbitrated the same question which I am now arbitrating. The person whom I then selected was a Mr. Nasmyth, on the Donibristle Colliery, a coalmaster, who was himself working under the rules that I objected to, and the arbitrator gave the decision in my favour.

8129. Can you say that any proposition which you yourself thought reasonable to submit to arbitration was ever rejected under this system?—That was not rejected.

8130. Have you ever had a case which was rejected?—I have not, because the second case is still pending.

8131. You have had two?—One settled, and the other is now pending.

8132. And in the first you were successful under the operation of the Act?—Yes.

8133. Is there any evidence which you can adduce to the Committee of failure of what you thought reason and justice under the Act in these arbitrations?—I cannot give an instance of failure, but you may see how natural it would be for a coal master to choose those persons who would be likely to give decisions in his favour.

8134. But, in spite of this natural sequence, you do not know a case to record; you cannot produce any case which follows this natural law which you lay down?—I cannot.

8135. *Chairman.*] Were you satisfied, in the other case, with the selection of the five by the colliery owner?—I thought it a very doubtful case, because the arbitrator there was a man working under the very rule that I objected to.

8136. Then, did the selection of the five appear to you to have been made upon right principles; who were the five; without giving us their names, will you describe them?—There was one mining engineer, and the other four were managers and owners of collieries.

8137. And was the mining engineer one much connected with owners of collieries?—Indirectly he was; I took what I thought to be the best man.

8138. You did not take the mining engineer?—I did not take the mining engineer.

8139. You took one of the men interested in a colliery?—I took the owner of a colliery who was working under one of the rules that I objected to.

8140. And he gave a decision in your favour?—He gave the decision in my favour.

8141. I do not ask an opinion as to the fairness or fitness of the five persons that were selected for the present case, but as to their description; what were they?—There were two mining engineers, a coal master, and two managers; I chose one of the mining engineers.

8142. And before him the case is now pending?—Yes.

8143. When you speak of Sir George Grey selecting one arbitrator, Sir George Grey would delegate to you the selection, I presume?—Sir George Grey delegates to me the selection.

8144. But, upon the whole, you think it would be more satisfactory that the coal owner should name one, that you should name another for Sir George Grey, and that those two should name an umpire?—I think so.

8145. Have you ever been deterred from referring cases to arbitration from your distrust of the tribunal?—No doubt of it.

8146. You have had cases that you would have referred to arbitration only you felt it was no use?—It was no use or I would have done so.

8147. Then, you have a decided opinion that an alteration of the law is required?—I think that

that if there should be any alteration that should be the extent of it; I do not think that the present law gives the inspector a fair chance.

8148. Mr. *Woods.*] I was about to ask you this question a little while ago, following on to those which I had before asked you; in spite of the adverse circumstances in which you thought you were placed in your first case of arbitration, you obtained what you regarded as a proper decision?—I did,

8149. Now, I come to a question following one which you have just been asked; this system of choice of arbitrators which you recommend is, that one should be chosen by each side, and that then those two should choose the umpire?—Yes.

8150. In practice, is not that handing over the choice of the arbitrator to two persons who are really advocates; the third man is the arbitrator?—To a certain extent it is so, but you would get rather more neutrality, I think, in that way than at present.

8151. Then, it amounts to this, that the owner and the inspector would choose two persons for the purpose of those two persons choosing a third?—It amounts to that.

8152. And the opinion of the third would, of course, be the one that would carry it?—The opinion of the third would carry it; he must be chosen before the arbitration begins.

8153. I do not think you made it quite clear whether, with regard to the decision of questions which really are questions of expense in the management of a colliery, the matter should be completely taken out of the hands of the owner of the colliery, having regard also to the fact that all the legal responsibility rests upon him?—But it might not be more expensive for the coal master to make the alteration I suggested.

8154. Now, let me ask as to the legal responsibility resting ultimately upon him, because I suppose you will agree with me that no responsibility rests upon the inspector?—No responsibility rests upon the inspector.

8155. He simply views and reports?—He simply views and reports.

8156. Then the legal responsibility rests upon the owner of the mine at the last?—I think not in this case which I have been arbitrating, because you will observe that the collier must, before he begins to work, satisfy himself concerning the safety of the working place. Perhaps I may mention here the special rules to which I object, and those which I suggest in their place. The special rules to which I object are these: "1. Before beginning to work, colliers shall satisfy themselves concerning the safety of their working places. 2. If, while at work, or at any other time, colliers shall discover or be informed of the existence of any obstruction in the ventilation, or stagnation, or impurity in the air of the colliery, or of the existence of any defect in the walls, roofs, or any other parts thereof, they shall be bound, without undue delay, to give information of the circumstance to the underground manager, or to the principal roadsman, or other person in charge of the colliery for the time, so that these defects may be remedied and danger therefrom averted. Colliers are expressly forbidden to go into or improperly near any place, throughout the whole colliery, where danger is known or suspected to exist." I suggest, in addition to those, these three special rules: "1. Colliers are expressly forbidden to proceed towards or into their working-places, at the commencement of any shift, until it shall have been intimated to them by the fireman, or underground manager, or other person acting as such for the time, that the working-places have been examined and are apparently safe to be entered. 2. Till such intimation of the apparent safety of the working places shall have been made, colliers shall either remain at the pit head, or at some other place assigned them for the purpose; if no such place shall have been assigned at which to remain, colliers shall always understand that the pit head is the proper place at which they are required to wait the requisite intimation. 3. Besides the intimation of apparent safety, given by the fireman, colliers must satisfy themselves of the safety of their working places, before commencing to work, either at the beginning of a shift or after any interruption of working during a shift, and shall obey the orders of the underground manager or oversman placed over them in all matters relating to their work, and the ventilation and safety of the pit."

8157. The substitution is in effect this: the one rule says, that "Colliers shall satisfy themselves concerning the safety of the working place"; the other rule is, that somebody employed by the works shall certify that the places are fit to enter?—Yes; and then the collier himself after that must (notwithstanding the intimation of apparent safety given by the fireman) satisfy himself of the safety.

8158. *Chairman.*] It is not substitutional; it is additional?—Yes.

8159. Mr. *Foster.*] You would not wish the removal of that rule, making it an additional safeguard that the workman shall satisfy himself?—No; it is an additional rule. I would not wish the removal of it.

8160. I ask the question, because witnesses before you have stated that they wished that rule abolished?—I think that the collier himself should be responsible as well.

8161. Mr. *Greenall.*] The long and short of it is this: that if your suggestion were adopted the owner of the colliery thinks that he would have a responsibility imposed upon him which he thinks does not at present attach to him?—Yes.

8162. And you desire to impose that responsibility upon the owner of the colliery?—Yes.

8163. That is the whole thing?—That is the whole thing.

8164. Mr. *Liddell.*] You said just now, that you had known cases occur which you would have referred to arbitration, but you felt that there was no use in doing so; I want to ask you this question upon that; if you had had the power of nominating your own arbitrator, would you have referred those cases to arbitration?—I cannot at the present moment specify any case wherein I would have done so.

8165. Then to what has the phrase "no use" reference?—I mean, that I think it is one-sided. Supposing I were a coal master, I would naturally select for the arbitrator those agreeing with me. I would see what their opinions were if I could ascertain them; at any rate, I would select parties who were of the same way of opinion as myself. In short, in that case which I have mentioned, had it been myself, I would have selected five coal masters instead of mining engineers.

8166. I presume you, acting on the part of Government, would do precisely the same thing on your own side?—No doubt of it.

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8167. Then, according to that, when these two arbitrators meet, do you think there is left much probability of their agreeing upon an umpire?—They must agree upon the umpire.

8168. How long would they be about it?—I cannot say that.

8169. At any rate, there would be a great deal of difference of opinion?—No doubt of it.

8170. Would you be willing in such cases as that, to place the appointment of the arbitrator in totally independent hands; would you leave it, say, to the judge of a court, or chairman of quarter sessions, or some man holding a high official position; should you object to that?—No.

8171. Have you ever discussed that matter with the coal owners?—I have not.

8172. Do you think that they would object?—I do not know?—They might object that the sheriff or the person with whom the appointment rested, would not be sufficiently acquainted with the question, to be enabled to fix upon the proper man.

8173. One word upon the onesided choice of arbitrators; I thought I heard from you just now that you had had an arbitration; of course the arbitrations were appointed according to law, namely, from the selection of the coal owner, but the question was decided in your favour, I understood you to say?—Yes.

8174. That shows that a fairness of decision may be arrived at even under the present system, does it not?—I do not think that a man would decide against his convictions, but his convictions would lean rather to his own interest.

8175. But in this case they did not?—Well, my request was very reasonable, I think, and he decided in my favour.

8176. It is an additional proof then of the justice of your claim?—I think so.

8177. But supposing there had been a little less justice in your claim, and that it had been a more disputable point, then you would have had some doubt as to the way in which the arbitration would have gone?—No doubt of it; I think it would have gone against me.

8178. *Chairman.*] Have you any suggestions to make of alteration in any of the other general rules?—No; there is nothing else that occurs to me.

8179. Is the eighth general rule as to making places of refuge attended to?—It is generally pretty well attended to. Wherever I find it not attended to, I at once get the thing altered.

8180. There have been such cases then?—Sometimes I have found it not attended to.

8181. When you have found it not attended to, was it neglected in a very gross way; for instance, instead of being 20 yards apart, were the places of refuge 100 yards apart?—No; the longest distance that I have found it neglected was 25 yards or 30 yards. In one case there was a doubt as to the meaning of the Act; it was a place about 12 feet wide, with a road of about three feet on one side of the tramway, and the manager said, "It is not a place of refuge, but there is a space of six feet where a man can walk up on one side, and there is plenty of room to get off the trains."

8182. It was not a double tramway, then?—No, a single tramway.

8183. Where there is a place 12 feet wide and a tramroad with six feet on one side of it, is it necessary under the Act to make a refuge?—In this case it was an incline, and anything falling down might have come down on the open space, and so hurt the men.

8184. That would be an injury from fall of roof, I suppose?—No, from the hutch running away.

8185. There is only three feet wide of tramway?—Yes.

8186. There would, therefore, be three feet on one side and six feet on the other. Could the Act require you to have a place of refuge in such a case as that?—I think, strictly speaking, it requires it.

8187. It is suggested to me to ask you whether you had occasion to investigate, some time ago, a case in the works of Mr. Robert Stewart of a violation of that rule; a case of an accident arising from a want of a place of refuge?—Yes, I had.

8188. Will you refer to your notes of that case?—Yes; I have them with me here.

8189. Mr. *Foster.*] Will you give us the date of it?—It is within the last month, Ballardie is the name of the place. The accident happened on the 12th of May; that was an incline 200 yards long, and the gradient was one in three. The place was about six feet high and about 12 feet wide; there was a travelling road on one side about three feet wide, and trees or props put up at every three or four feet; it extended in that way for about 40 or 50 yards, and then after that there were regular places of refuge.

8190. Mr. *Liddell.*] It was a double incline, I suppose?—Yes.

8191. Where the heavy waggons pulled the light waggons up?—No, there was an engine.

8192. *Chairman.*] It was only a single tramway?—Yes, only a single tramway.

8193. How did the accident happen?—The accident happened in this way. There was somebody working at the bottom of the incline, lengthening it, and two girls came down the pit in a frolic to see the pit, and brought down the men's supper with them; the men who were working underneath came up to the pit's bottom; this incline, I should say, is at the bottom of a pit 30 fathoms deep.

8194. They came up to the top of the incline?—Yes, they came up to the top of the incline. After the men had got their supper they said they would descend on the carriages, and the women with them, just to see the place. The carriage stands on the incline, so that the carriage goes away when there is slack rope. From some cause or other, after the signal for the engine-man to lower the rope, it had gone away about 16 feet, that is to say, there was about 16 feet of slack rope before the carriage started. Some one then gave the carriage a push, down it went and broke the rope, and the two girls and the men were precipitated down the incline.

8195. That accident was not from want of a place of refuge?—No.

8196. That was the accident you spoke of before, I presume?—No, that was another accident.

8197. Upon the whole, is the eighth rule, as to the making of places of refuge, sufficiently complied with in all places in your district?—No, it is not sufficiently complied with, unless there is a place every 20 yards; but, generally, it is well complied with in my district.

8198. When you have made representations

of

of its not being complied with, have those representations been attended to?—I believe that there are places of refuge being put in now at this time.

8199. You have no alteration to suggest for greater stringency in that respect?—No.

8200. There have been suggestions made to us that every 10 yards there should be places of refuge?—I see no need of that.

8201. Mr. *Foster.*] I will call your attention to the notice of an accident which you received about the time which you have mentioned, namely, the 12th of May; whether it is the same or not I do not know; but I will ask you whether you remember hearing of an accident occurring upon an inclined plane where one young man was crushed, and died from the effects of the accident?—Yes, I remember that case; I have it in my book with me; that was another accident from an incline.

8202. Mr. *Greenall.*] What is the state of that?—It happened on the 8th of May, and I visited the place on the 15th.

8203. Mr. *Foster.*] Did you find there that there were places of refuge provided according to the Act?—That is what I was describing to the Chairman in the first instance. There were some places where there were 25 yards betwixt the places of refuge, but I believe that that will be put right now.

8204. Had your attention been called to that previously?—No.

8205. Did you take steps, on seeing the place, that proper places of refuge should be provided in future?—Yes, I did, and I have a letter from the manager, saying that those are now put in. I may state (to show the little interest that the workmen take in that matter), that I went down the mine and examined into the accident, and I went through the workings afterwards and examined two colliers who had been working at the place, and had helped to remove the men. "Now have you anything to complain of," I said, "because I am here for the purpose of hearing any complaints." "No, we have nothing," was the reply. "Is there any place wrong, or have you any suggestions to make"? I said. No, they had none. Then, I asked them whether they did not know about having places of refuge; and they said, no, they did not know anything about that.

8206. You do not consider that there was any fault at all resting upon you as the inspector in consequence of that accident?—No, I never knew of the want of the places of refuge.

8207. No system of inspection could have provided for such a case in default of the men communicating the absence of places of refuge to the inspector, or to the inspectors, supposing there had been any increased number of inspectors in the district?—No. If it had been complained of to me before, I should have gone at once and had it rectified.

8208. *Chairman.*] In reference to this question that you asked those two workmen, did you put that question in the presence of the manager?—No.

8209. Mr. *Fawcett.*] Did the accident happen from the places of refuge being too far from one another?—No, it had no connection with that at all.

8210. Mr. *Greenall.*] This question was asked of a witness, "Do you know how many collieries he," (meaning yourself) "has to attend to"? and the answer is, "There are 1,140 pits in Scotland under the Inspection Act." The next question is, "And but two inspectors, are there not," and the answer is, "Yes, but two inspectors; it would take them two years to pay a visit to all the pits. The inspector in this case may not be to blame in the matter, because he has not time to do the work"?—I think that arises from a misconception of the duties of an inspector. An inspector is not expected to go through all his pits every year, or at any time, but he is to attend to complaints that are made to him, and to make what examinations he can; but to expect that he would know the state of every colliery would be to lay such a responsibility upon him as that a man might go so far as to say, if an accident happened, that the inspector was to blame. Why, if that were the case the inspector's first care in making out his report would be to protect himself instead of making an impartial report upon the facts.

8211. But you do adhere to the opinion which you expressed to me, that the work which the Inspection Act contemplates being done, is done?—It is done thoroughly, and the consequence is that we have fewer accidents in Scotland than in any other part of the kingdom.

8212. That is your conviction?—That is my thorough conviction.

8213. Mr. *Liddell.*] Is it consistent with the rules and regulations of the collieries in your district that women should go down the pits at all?—No, it is contrary to the Act of Parliament.

8214. So that this foolish larking, in consequence of which the lives of men were sacrificed, was contrary to law?—Yes.

8215. Mr. *Foster.*] Were these women working in the pit?—No.

8216. Then it was not, in that sense, contrary to law for them to be down in the pit?—But the engine-man should not have allowed strangers to go down into the pit.

8217. Mr. *Liddell.*] I imagine that no women should go down into any pit unless by the special permission of the manager or owner?—No stranger should go down without special permission.

8218. Mr. *Fawcett.*] Do you often inspect a colliery when you do not receive any complaint connected with it?—Yes.

8219. Do you mean that you may just visit it as a matter of chance?—Just to see that the Act has been carried out.

8220. When you visit collieries under those circumstances, do you give any previous notice to the managers that you are coming?—Sometimes I do, and sometimes I do not.

8221. You are not bound to do so?—No, I am not bound to do so.

8222. Do you always, if you receive a complaint from a man, attend to it as soon as you possibly can?—I always attend to it as soon as I possibly can.

8223. And do you go down, if necessary, to inspect anything connected with the workings underground?—I go down to inspect anything referred to in the complaint.

8224. Are the complaints that you have received from men very numerous?—Not very; I had six complaints in 1862.

8225. What did those complaints refer to?—They were principally as to the ventilation of non-fiery collieries.

8226. Do you ever get any complaint made by any of the men with regard to the employment

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of children contrary to the Act?—I have had such complaints.

8227. What number?—I cannot answer that question just now; but very few; perhaps three or four during the last four years.

8228. Mr. *Foster.*] Have you had any complaint made as to the employment of a boy continuously for three days and three nights in your district?—No, I have had no complaint made about that. That question does not come under my notice, as to the hours of the boys being employed. I presume you refer to some boys at Shotts; I had a complaint about that, which I investigated.

8229. Will you explain that case?—I had a note from Mr. M'Donald, that Lachlan Shelley had three boys working in Spring Bank Pit, one of whom was under age. I went down the pit, and saw Shelley and his boys working; there were then only two boys; one of them, Thomas Shelley, was 14; Pat was 13; so that I had nothing to say to them. He said that he had no third boy working. I did see, however, whether those two could read and write; Thomas could write, and Pat could read.

8230. *Chairman.*] One could read and the other could write?—Yes, one could read and the other could write; and there is Thomas Shelley's signature (*showing it to the Committee*), which is not bad, I think. Then there was another complaint which Mr. M'Donald made, as to a man called Thomas Russell and his son Walter. Mr. M'Donald said that the boy, Walter, was under age, and could neither read nor write. They were not down the pit, but I got at them and saw them, and the boy had a certificate that he could read and write; and he was between 10 and 11. I also got him to write his name in my book.

8231. Mr. *Fawcett.*] What course do you adopt, supposing you find that a boy is employed illegally, either from being under age or from not being able to read and write?—If I found that the master was not aware of the boy being employed at all, I think it would be hard to adopt proceedings against him. I inform him in the first place, and the boy is generally put out.

8232. But suppose the boy is not put out, what then?—Then at once I should inform the Lord Advocate, who would cause proceedings to be taken against him.

8233. How many informations of that kind, of boys being improperly employed, have you laid before the Lord Advocate?—I do not think I have had more than three or four during the last four years, and I do not think I found more than one carried further.

8234. When you had laid that information before the Lord Advocate, what course did he take?—In one case he ordered a prosecution, and a penalty of 10*l.* was inflicted.

8235. So that that is really the only legal penalty that has been enforced during the last four years?—The only one that there was occasion to enforce.

8236. Do you think that boys are often illegally employed without your knowing of it?—I think it quite possible.

8237. Then, increased inspection would discover those cases, would it not?—I do not think it would.

8238. Can you suggest any means of discovering whether boys are illegally employed different from those that exist at the present time?—It is entirely a question for the workmen themselves that they should not take boys down at that early age, for the master does not want them; but really I could not suggest any means for discovering it. I believe that the masters do all that they can to prevent it; that is my candid opinion.

8239. Is there not a strong feeling, in many of the trade societies, about the employment of the boys?—I cannot speak to that.

8240. *Chairman.*] You do not think that the inspectors require assistance in the shape of sub-inspectors?—No.

8241. You have heard of such a suggestion, I suppose?—I have heard of such a suggestion.

8242. You do not recommend its adoption?—No; I am afraid that they would put us in bad odour with the coal masters, and that we should not be able to carry out any suggestion at all.

8243. Has your attention ever been called to the question of the manager of a mine having a certificate, the same sort of certificate that captains of ships have, for instance?—I have heard such things talked of, but the cases are very different. A ship captain goes away, and no one is near him for months, it may be, but a manager of a colliery is a man who is daily looked after both by the workmen, and by others, and as to his qualifications, he requires to be a man who knows how to manage men, as well as to have scientific knowledge; he requires to be a man of tact, a man of great common sense, of firmness and kindness, and I do not see how you could make any examination into qualifications of that kind; it would interfere too much, I am afraid, with rights of property, if you were to attempt it.

8244. I was not speaking so much of the certificate of examination as a means of obtaining competent men, but I was speaking of it as a means of insuring an observance of the regulations contained in the Act of Parliament, or of those regulations which are made under the Act?—I do not think that any examination would insure that.

8245. Leaving out of consideration the question of examination, and assuming all the present managers to be competent men, will you give me your opinion whether granting a certificate with the power of recalling that certificate, or of suspending it for a time, would not induce much stricter observance of the Act of Parliament, and of the regulations which are made under the Act, than is now secured?—No, I think not; I think that we reach that point better by the facility with which, if the rules are broken, the men can get compensation by law.

8246. The granting of such a certificate would not exclude any remedy which the men now possess, would it?—The men take that remedy themselves now in their own hands.

8247. The granting of such a certificate as I have specified would be an additional remedy, which would not weaken the effect of the other remedy, I presume?—The master would very quickly dismiss his manager if he were a bad one.

8248. The result of your evidence upon that point is, that your attention has been called to that subject, and you do not recommend the adoption of such a plan, as I understand you?—Just so; I think it may be left to the masters themselves; they are the parties to deal with it.

8249. Mr. *Hussey Vivian.*] In reference to the education of boys, do you think that it is wise to have one law applicable to collieries, and for every

every other industry in the kingdom to have no such law applicable?—I do think that boys working in pits are a little differently situated from those engaged in any other kind of work. If a boy is under-ground all day in lamplight, his case is different from that of a boy who works in daylight, or who is employed in out-door labour; and I think that there should be some other means used as to the education of these colliery boys than are used for other boys: in short, as I have said before, unless a boy is educated before going into the pit, I do not think that he will ever get educated after.

8250. Is not that the case in regard to any other industry also?—I do not think so.

8251. What is the difference between a boy employed in a colliery and a boy employed in any other industry?—The difference is that the colliery boy is confined under-ground all day, and when he comes out of the pit in the evening he wants to go into the open air.

8252. But whether he is confined in a mill, or in an iron works, or at any other description of labour, is he not, to a certain extent, in confinement all day, and does he not, in the same way as the colliery boy, desire to play in the open air when he comes out from his work?—No, not quite to the same extent; he gets his breakfast hour, and his dinner hour, which brings him into the air, and which a boy employed under-ground does not get.

8253. Do you think that the effect of legislation on this subject has been to make it difficult to obtain boys in the pits?—I do not see that it makes much difference in that respect.

8254. You do not think that this present law has had a tendency to divert the labour of boys from collieries to other channels of labour?—I do not think so.

8255. Mr. *Woods.*] Are you aware that the question of having sub-inspectors was submitted to Parliament, being moved in Committee at the time when this Act was passed, and that the proposal was rejected?—I am. I have read the report, and I think that the remarks on that subject, in the report, are very just.

8256. As to the managers being certificated, I suppose that if the managers were certificated there would really be a limitation of a master's choice of managers. He would be bound to choose out of the certificated managers?—Yes.

8257. And I suppose that the effect of that would be to raise the cost of the management?—I would not say that.

8258. Or to put it in another way, the effect would be to raise the wages of the managers?—Yes, I think it would do that, without doing any good.

8259. Mr. *Greenall.*] I am requested to ask you this question. Do not you know that in regard to the case of which you have already spoken, a third boy, Shelley, was employed in the mine, and do not you know that he was put out of the mine by order of his employer?—His father told me that a third boy had been down some months before just to keep him company, but that he was not engaged in working in the mine, and he told me that he put out no more coals on account of that boy being there, and derived no benefit at all from it.

8260. Your knowledge then is confined to the circumstance that this boy went down the mine to visit his father, and not to work?—Yes; I spoke sharply to the father about it, and told him that it was a cruel thing to have so young a boy down the pit, and to have him down three days and three nights, as somebody had said; but the man denied it, and, of course, I can only take his denial. I do not think that it is possible for a man to be down three days and three nights in a pit.

8261. Do you know whether the circumstance came to the knowledge of the employer?—I do not know that. It was denied by the father.

8262. What is the general appearance of the boys who go down the mines; is it healthy?—Colliers' boys are rather sallow in their complexion, because they have no sun upon them.

8263. Have you seen any instances in which deformity has been induced by their labouring in mines?—No, I have not.

8264. Would you think this an exaggerated description of their condition which I am about to quote. A witness who was being examined before this Committee was asked this question, "Have you known boys seriously injured of late years by this sort of work?" "No," he says, "I do not know that I have, but I may say this, that you may know the boy who belongs to a mine perfectly well, by his being twisted and stunted in growth, and in his joints." I understand you to say that you have not see instances of that yourself?—I have not.

8265. You think that that would be a somewhat exaggerated description?—I never saw it myself; I am afraid that it is exaggerated.

8266. Mr. *Woods.*] It is true, I suppose, that colliers, who have to work in a recumbent posture, have a very slovenly gait, and are unlike soldiers in their bearing?—Well, I saw, the other day, a company of the Lockgelly Volunteers praised for their smart appearance.

8267. General *Dunne.*] Was there not another accident that you are aware of, in this colliery, to which reference has been made, of Mr. Stewart's, at Omoa?—That is the case which we have already spoken of.

8268. Was there another at Cassidy?—I do not recollect that; there was one in the case of Wardrop, at Omoa, at the Batbardie works, belonging to Robert Stewart.

8269. Were all these aceidents reported to the Lord Advocate of Scotland?—All of them were reported to him, I think.

8270. And he has taken no steps about them?—He has not had time yet to do so.

8271. Then he may take steps?—He may.

8272. Do you remember the number of women employed in your district?—In my district there are 46 women employed in Lanarkshire, 50 in Sterlingshire, 34 in Edinburgh, and 162 in Fife.

8273. Sir *Philip Egerton.*] In answer to a question which was put to you by an Honourable Member, you stated, I think, that you had six complaints made to you in the year 1862?—Yes.

8274. Have you got any means of telling us the number of complaints that you had in subsequent years?—Yes.

8275. Will you tell the Committee the numbers?—In 1863 there were eight complaints made to me, in 1864 there were 5, and in 1865 there were 10.

8276. Mr. *Woods.*] With regard to the question of the employment of women, have you any knowledge of the state of the case in the town of Crewe on that subject?—No.

8277. *Chairman.*] Have you any other suggestion which you wish to make to the Committee?—I have no other suggestion to make.

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In regard to the employment of women, I may remark that they are decently dressed, and that there is nothing at all repulsive in their appearance when they are engaged in working on the pit's bank; it is the custom of the country, in fact, and I think that it would be a hard thing that they should be denied the privilege of working there if they wish it.

8278. Mr. *Fawcett.*] You do not think, perhaps, that the employment which the women have on the pit's bank is worse than the employment of women who are engaged in agricultural labour? —Certainly not.

8279. Mr. *Woods.*] I suppose that your objection to interfering with the labour of women on the pit's bank is rather an objection to the principle than to the detail; you object to putting a legislative restriction on the free labour of women on the pit's bank, as you would object to putting a legislative restriction on the free labour of any other class of Her Majesty's subjects?—Yes; but I think that in time it will decrease, and there will be no women employed at all in that way.

8280. Are there circumstances within your knowledge in which it would be a very great hardship if there were any legislative prohibition imposed on the labour of women on the pit's bank?—Yes, it would be a great hardship in many cases. I have inquired particularly into the question, and I find that it would be a hardship to the women employed round Fife, where there are no factories near to give them any other employment. There are often widows and decent women engaged in this way who would have nothing else to do.

8281. *Chairman.*] Are you able to state to the Committee anything about the truck system?—Nothing, except from hearsay.

8282. I suppose, that inasmuch as it does not involve a positive violation of the law, it has not come under your notice?—Under the 5 & 6 Victoria, I think that we have something to do with it.

8283. But you have not really inquired into it, as I understand you?—I have not.

8284. And, therefore, you have no evidence to give the Committee on that subject?—I have no evidence to offer on that subject.

8285. You have nothing to say either for or against it?—Nothing, either for or against it.

Monday, 4th June 1866.

MEMBERS PRESENT:

Mr. Clive.	Mr. Greenall.
General Dunne.	Mr. Kinnaird.
Sir Philip Egerton.	Mr. Liddell.
Mr. Wm. Erme Foster.	Mr. Neate.

GEORGE CLIVE, Esq., IN THE CHAIR.

JOSEPH DICKINSON, Esq., re-called; and further Examined.

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8286. *Chairman.*] I HAD not the pleasure of hearing your examination before, but I believe that you have something to add to your evidence on the subject of coroners' juries?—That is one of the points that have been spoken to; the present mode of carrying out the coroners' inquests being represented as unsatisfactory. At present the coroners' juries are selected from any men that can be conveniently had in the neighbourhood. I have made inquiries amongst the police, and they say that there is no partiality shown in the selection of the juries; that they are very glad to have colliers amongst the others when they are to be obtained; but that as a rule, the men are at work, or that when they are not at work, there is a disinclination frequently on their part to act as jurymen. I can say this much, that within the last fortnight, in a case where a collier was summoned upon the jury, he did not attend, and was fined 10*s.* The coroners also say that they have issued no instructions to have colliers excluded; but, as far as I have gathered their opinions on questions which I have put to them, they do not think that any restriction would be desirable. They say that about 20 or 30 years ago the last remnant of restriction on that point disappeared. At that time, when a person died in gaol, half the jury had to be prisoners, but the Act relating to that has, I think, been repealed.

8287. In fact, now there is no restriction whatever?—None.

8288. Mr. *Greenall.*] You do not say that there is any designed exclusion of working men from juries?—No; I do not think there is.

8289. *Chairman.*] You think that the absence of working men from juries depends upon their own disinclination to attend?—Patrtly that, and partly the fact of their being occupied generally. There is a difficulty in getting a coroner's jury together, because it is difficult to get people who are disengaged during the day.

8290. Mr. *Greenall.*] Have you ever heard any complaints from the working colliers on that subject?—Never.

8291. *Chairman.*] Is that all you have to say about the juries?—Yes; I have nothing more to say about that.

8292. As to the weighing clause; have you any remarks to make upon that?—So far as my district is concerned, I only know of one colliery where the coal is weighed.

8293. That district being what?—North and East Lancashire. It seems to me, however, perfectly fair that the coal should be weighed; there is no fairer way of determining the amount of work done than by weighing; and the only objection I can see to it, is the trouble of doing it.

8294. Have you had many complaints from the working men on that ground?—No; I do not recollect a single one. In fact, I do not see that this weighing clause has anything to do in this Act of Parliament. If you look at the Preamble of the previous Act, you will find that it is with a view to the greater safety of the persons employed in and about coal mines, and not on commercial matters; and there is a broad line of distinction, I think, which should be kept up between the two, so as not to introduce matters which relate to masters and workmen generally, into an Act which has to do, with that one exception, exclusively with safety.

8295. Do you remember the discussion which took place when this Act was being passed as to the weighing clause?—Yes.

8296. And you recollect, do you not, that the men were then satisfied with the clause as it now stands in the Act?—Yes, they were.

8297. Do you think that they require anything more?—Under the present clause I think that they have ample power to see that the weighing, gauging, and measuring is satisfactory.

8298. Mr. *Greenall.*] When you say that there would be trouble involved in weighing coal, is the definition of the word "trouble" in your mind "expense"?—Yes, that is nearly all of it.

8299. *Chairman.*] You mean trouble to the masters?—Yes, it would make the accounts very much more complicated.

8300. Mr. *Greenall.*] Which resolves itself into a question of expense?—Just so.

8301. Mr. *Liddell.*] Has any complaint ever been made within your recollection of the inaccuracy of the weighing machine?—I was at a particular colliery from about a year to two years ago, when I was asked to go to the adjoining colliery, the Bower Colliery at Hollinwood; I was told that the men had struck in consequence of the tubs not being properly paid for; that more weight was being sent out than they were being paid for; I went there and found that such had taken place; the masters had got a temporary machine on the bank, and the men were dissatisfied with it, and it was not weighing out so much as the men expected, nor so much as they had been previously paid for; the masters said

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said that a permanent machine had been ordered, and would be fixed as soon as it possibly could; that machine, I have been informed by the owners, has since been fixed, but it does not weigh out as much as was expected; the men have again expressed dissatisfaction with it, and rather than have any unpleasantness with the men about it, the owners have allowed them to go back to the old custom of measurement; but the masters at that Bower Colliery at Hollinwood would much prefer the weighing, if the men desired it.

8302. It has been suggested by some of the workmen that these machines should be liable to periodical inspection by inspectors of weights and measures; do you think that that would be desirable?—I have not seen any necessity for it in my district, because things seem to work very harmoniously; there seems to be perfect confidence between the masters and the workmen on that point; the men think generally that they are fairly treated, and the masters would scorn, I believe, to treat them unfairly.

8303. As I understand you, that is the only case in your district of inaccuracy being proved against a machine?—It is the only case except one where there is a machine; at the Moston Colliery, which is also in the same neighbourhood, there is a machine, and the men have what they call a "justice man."

8304. That is to say, a check weigher?—A check weigher; and there I am informed the weighing works satisfactorily.

8305. *Chairman.*] Do you wish to say anything with regard to the power of stopping a pit?—I see that there is a point that has been taken up before the Committee, and that it has been urged that an inspector should have such power given to him.

8306. What do you think of that suggestion?—I think that, practically, we have such a power, though not under the Act.

8307. In what way have you such a power?—I think that if you found a pit being worked under such exceedingly dangerous circumstances as to require your interposition in that way, and if you pointed it out to the manager, and told him that you had not such a power, but that if you had you would exert it, and that should anything happen you would certainly hold him responsible, he would not dare to carry it on after such an expression of opinion. I recollect in one instance last year my attention being called by one of the delegates to a colliery in my district, and I found the pit being worked under such dangerous circumstances on both sides, that they then and there, on my representation, cleared out about 60 men; and I believe, had they not done so, an explosion would have taken place before the middle of the day had passed. I think that we have sufficient power on that point, and I find that I can get my representations attended to sufficiently without having that power put in the Act of Parliament. It is a power that might be abused.

8308. Mr. *Liddell.*] Was that a pit worked upon the old system, or upon the improved system which you have been so instrumental in producing?—It was a pit that was worked, I think, with a view to getting as much coal out of it as they could within a given time. It has been stopped within the last three months; it is called the Cockeymoor Colliery, Mr. Middlehurst being the owner.

8309. I presume it was not worked in a manner to meet with your approval?—Very much the reverse.

8310. *Chairman.*] You think that, practically, you have the power in question?—I think we have sufficient power on that point.

8311. Have you any remarks to make as to special rules and supplementary rules?—Only to this extent; I understand that it has been stated here that the men have not an opportunity of objecting to special rules which are proposed. The rules for every colliery in my district have been posted up the required period of 14 days, and there has not been a single objection raised to a single rule in these collieries. The only objection made in one case was that the pay place was rather too far away from the colliery.

8312. Do you think that the men generally read the rules?—Some of them do.

8313. Do you think that those who do read them make them known to others; do you think that there is, in fact, general knowledge throughout the colliery of the rules?—Not so much as there could be.

8314. Do you think that any more can be done in that direction by collecting the men together?—No, that has been done at some collieries, and there have been such tumults in consequence that I should not like it continued. The supplementary rules, however, that are complained of, I think, are complained of justly; I do not think that the masters have any right to put those supplementary rules at the end of the special rules; they are supplementary rules relating chiefly to matters between masters and men, but they are put in at the end of the others in such a way that, I think, any ordinary person would believe that the penalties applied to them; it is quite right to have supplementary rules, but not to append them in such a way as that to the special rules.

8315. In such a way, you mean, as to make people believe that they have the sanction of law?—That is the view I take of it; I only had two collieries in my district where that was done, and, upon my representing the thing to them, they have withdrawn them, and I believe I have not now a single colliery in my district with any supplementary rules attached; these owners, however, to whom I spoke, informed me that a legal opinion had been taken on the subject at Wigan, and that they were advised that such supplementary rules were in accordance with law.

8316. Mr. *Greenall.*] Your feeling is, that it is undesirable to give the working men an impression that these supplementary regulations have the same force as the special rules?—I think it is quite undeniable in any way; it may be quite right to have regulations defining the contract, say, for fixing the time of notice, and for carrying on the work of the colliery generally, but do not attach them to the rules relating to safety, and misleading persons by making them suppose that penalties attach which really do not attach.

8317. Do you think that they never should be appended to the other rules?—I think that they should not be appended to the other rules, although I am told that the owners have taken advice upon that point, and that they are advised that it is legal to have them so appended.

8318. You think it better to have them separated?—That is my opinion, and in my district they are invariably separated.

8319. *Chairman.*]

8319. *Chairman.*] You think that nothing whatever should be added to the official rules?—Yes, that is my view.

8320. That if the masters wish to put down anything as a matter of contract between the men and themselves that should not be put down on the same paper?—No; a separate piece of paper. A thing which I might perhaps suggest as what seems to me to be most wanted, is to collect the different statutes relating to mines into one Act of Parliament. There are many people who do not know that they are liable to a penalty of not less than 25 *l.* and not more than 50 *l.*, if they employ an engineman under 18 years of age to raise or lower persons. They think that all the regulations of the 5 & 6 Victoria, which are in force, are comprised under the 18 & 19 Victoria, and that there are no penalties except those mentioned in the latter. Then, too, there are several other statutes which relate to mines.

8321. You think that you want a consolidation in fact?—I think that if anything is wanted it is that, because decent and well meaning people are misled, now they do not know the penalties attached to certain things. I see by the 7 & 8 Geo. 4, c. 30, that there are some serious punishments for causing water to be conveyed into a mine, or filling up or obstructing any airway with water. A man may for that offence, be transported beyond the seas for a term of seven years; and under the 7 Will. 4, and 1 Vict., c. 80, for maliciously setting fire to a coal mine, the punishment is still heavier; but I do not think that any of the colliers know anything about any of these statutes.

8322. As you are on the subject of these statutes, I will ask you whether you are acquainted with the 4 George 4, the Act by which men can be imprisoned for breach of contract?—Yes, I know that there is such an Act, though I have never had much to do with it.

8323. Have you ever heard it complained of?—Yes.

8324. What do the men say about it?—They think it unfair that they should be liable to imprisonment, while the master is only liable for a breach of a civil contract.

8325. They think it unfair that one should be criminal and the other civil?—Yes.

8326. Have you ever had any conversations with the masters about that?—Yes.

8327. What do they feel about it?—They seem to think that there must be some check kept over the men, so that they may not abuse the trust reposed in them.

8328. Would they not be satisfied with civil proceedings before the county court judge?—Some of them do not appear to be satisfied with that, but for my part, I should be perfectly satisfied with it. I would not put a collier into prison if I could possibly avoid it.

8329. You would treat it as a civil contract?—Yes; if you make it a criminal matter, when a collier stands up in the dock, there is such a difference in the appearance of that man from the rogues and vagabonds who have gone into the dock before him, that no judge or jury will be willing for the man to be convicted. I think it is too great a power to give to the masters for them to be able to have a man punished. That is all very well for crime, but there is a difference between a crime and an offence.

8330. Mr. *Liddell.*] Judges and juries, I hope, are not always guided in their decisions by the appearance of a man's face when he is brought into the dock?—It almost invariably happens, that if there should be a collier, or anyone sent to take his trial for manslaughter in any matter relating to a colliery, they acquit the man; if the grand jury do not ignore the bill, the judge or the jury almost invariably find some palliation for the offence.

8331. I want to have your opinion as an experienced man upon this question. If an act of carelessness involves a risk to the lives of every man employed (say to a hundred men), in that pit, although that may not be perhaps morally viewed as a crime, yet surely it assumes an importance that the law must recognise, does it not?—Well, the law does recognise it, and under the Mines Regulation and Inspection Act, he is liable to be imprisoned for three months, or fined in any sum not exceeding 40 *s.* But perhaps the opinion of one of the oldest coroners in my district would be of more weight than anything I could say to the Committee on that point. In talking this matter over with him, I have found that he is of opinion that the Mines Inspection Act, by applying special penalties to offences in relation to collieries, will practically have the effect of taking them out of the criminal law, and he is one of the best criminal lawyers that I know. I refer to Mr. Rutter, who is the magistrate's clerk at the New Bailey, in the hundred of Salford, and who must have held inquests, I should say, on 20,000 or 30,000 people.

8332. Are you in favour of repealing all criminal legislation upon this subject, leaving the offence when committed, to be dealt with entirely by civil procedure?—I think the criminal offence must still remain as the foundation upon which to base things, but it should be called into play as seldom as possible.

8333. I presume it is so practically—Yes, perhaps practically it may be said to be so.

8334. Have, within your experience, many criminal proceedings been taken under this Act?—Yes, and the result is almost invariably acquittal.

8335. So that the law to a certain extent is held, so to speak, in disrepute?—It is on that point.

8336. Mr. *Foster.*] What kind of cases are you speaking of?—Where for instance an engine man has through some neglect caused an accident in the shaft; he may have started without a signal and caused a fatal accident in consequence.

8337. Then there would be a coroner's inquest, and a verdict in that case?—Yes.

8338. How could you take that out of the cognizance of the regular criminal law; do you speak of making these cases exceptional to miners?—I consider that that does come within the cognizance of the criminal law. But speaking of this coroner, who is a very experienced lawyer, I may say that he lays it down that practically it is going out, and instead of directing his jury to find a verdict of manslaughter in such a case, he would lay it down to them that there is a special Act of Parliament relating to these matters, and that their duty would be to find a verdict of accidental death, and to leave it to me as inspector, to see that the penalties are brought into play under that Act.

8339. Mr. *Greenall.*] Would it not result, that if the man was fined and did not pay the penalty, he would find himself in prison?—Yes, you must have something to date all punishment from. Capital punishment is the basis of all punishment; for instance, you must take some leading principle to begin upon.

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8340. I was only thinking whether, according to the view which you expressed a short time ago, people would not be more disposed to fine than to convict men; for I understand you to say that they are not disposed to convict colliers now?—I think that some magistrates are far too ready to send colliers to prison for an offence against the Mines Inspection Act, and in that way I think that they do more harm than good, and that a fine would be much better than imprisonment.

8341. *Chairman.*] Will you be good enough to distinguish between offences against the Mines Inspection Act, which are specially made criminal by the Mines Inspection Act, or if not under that Act, then by the common law and breaches of contract. Is it your opinion that there should be no criminal punishment at all, for that which is in fact only a breach of contract by the miner?—Yes, I think there should be no criminal punishment at all under the 4 George 4.

8342. You think that that ought to be at an end?—I think so.

8343. And with respect to the question relating to criminal proceedings which Mr. Liddell put to you, I presume that any offence by which the lives of men were endangered, you would leave to the ordinary action of the common law of the country?—Yes, I am always sorry to see any collier sent to prison.

8344. There are some offences of colliers, however which must be dealt with as criminal offences, are there not?—I think that there are very few such.

8345. If a man voluntarily cut a rope by which another man was suspended, that you would consider a criminal offence, would you not?—Yes; but I never knew such a case as that occur, except once in my district, and then no one suspected the colliers of doing it.

8346. Supposing such a thing as that to take place, that should be subject to the ordinary criminal law, should it not?—Yes.

8347. But speaking now merely of questions of simple contract, those you would not treat as criminal questions?—That is my opinion. I think that it is one-sided to punish the men by imprisonment, and not to punish the masters by imprisonment.

8348. Mr. *Liddell.*] The inference which I draw from the evidence which you have just given is, that your experience leads you to think that colliers do not commit offences wilfully?—It is very rarely indeed that they do commit them wilfully; and I say that it is hard to send a man to prison for what may really be an error of judgment, and may result from his not being sufficiently well up to his duties.

8349. *Chairman.*] Have you anything to add upon that point?—I think nothing more.

8350. With reference to the arbitration clause, you recollect, do you not, the discussion which preceded that?—Yes.

8351. And you recollect how it ended in everybody putting in something, and the clause being at last very long and very unintelligible?—Yes; we think it such a one-sided clause that I have never had any arbitration upon it. Of course, under the Single Shafts Act, before extension of time could be granted, it was necessary to have arbitration in the case of that question arising, and so, merely for the purpose of complying with the form of the Act, I have had an arbitration, which might have been dispensed with.

8352. Could you suggest any clause of a similar form which you think would be equally satisfactory?—If you recollect, it was thought, both by the inspectors and by the Government, at that time, that it should be a fair arbitration, one arbitrator being appointed by the inspector, the other arbitrator being appointed by the coal owner, and an umpire being chosen by the two. That was how the original Bill stood.

8353. Was that objected to?—Yes; that, as I say, was the original Bill; but the coal owners came in such great force that I think something had to be given way to them on that point.

8354. And the result was the present clause?—It was.

8355. Which you say is practically inoperative?—It is practically inoperative, I think, because an inspector only resorts to it when he wishes to relieve himself and the Government from responsibility.

8356. And you are still of opinion that the old clause which was first introduced by the Government into the Act was the best?—Yes, that was a fair arbitration, I think.

8357. Mr. *Liddell.*] If that old clause were introduced into the Act, supposing that a dispute should arise, and that you should be obliged to resort to arbitration, what sort of man would you choose as your arbitrator. If you were engaged in the case of a particular colliery in a dispute with the owner, would you go to a neighbouring colliery to find an arbitrator; would you confine yourself to that district in choosing your arbitrator, or what steps would you think it best to take?—I should choose some one who had a knowledge of the district. The Act confines it to a person who has a knowledge of the district.

8358. But you would be careful, would you not, to select some one who you thought was not likely to be influenced in any way whatever by the persons with whom you were in dispute?—Certainly.

8359. By this time you have seen a good deal of the working of the Act; do you think that that improvement which you suggest as to arbitration would meet with much opposition on the part of the owners?—Yes, I think it would; we have failed on previous occasions to carry it, and I do not know whether it could be carried now. The masters consider that it is unconstitutional (that is the word they use), to propose any ordinary arbitration in matters that relate to their private affairs; and there is some weight to be attached to that argument.

8360. Do you agree in a view which was expressed by Mr. Moore on the last day, that the law should be altered to the extent of saying that no boy shall go down a pit till he is 12 years old?—No, I would not make any such alteration. As it is now, the present restrictions, as I have already told the Committee, go quite far enough; they work well as far as they go, but they should go no further. As it is, when I get boys stopped, I have seen the boys go away crying about it, and the parents made quite cross. I have said to the colliers sometimes, "What folly it is for you to bring boys under the age into the pits, when you are actually petitioning Parliament to have this age extended."

8361. *Chairman.*] You mean boys under 10 years of age?—Sometimes actually under 10; and sometimes under 12, without the required certificate.

8362. Mr. *Liddell.*] It is only just to Mr. Moore to say that he did not advocate this as a popular measure on the part of the workmen, but he distinctly stated that it would be a very unpopular step to take, and you confirm that opinion as I understand you?—I do most distinctly;

tinctly; and I may say that Mr. Alexander, the other inspector in Scotland, has also stated, in his published report, that the present restrictions are not popular.

8363. *Chairman.*] What is your idea with regard to the general increase of wages in your district?—Wages have gone up very considerably in my district.

8364. Would you say that they have gone up as much as 25 or 30 per cent. in the last 10 years?—Fully; the inspectors' pay is the point where, as we think, the greatest grievance exists. Seeing the people that we have to transact business with, and the pay which they receive, and the pay which we receive, we certainly are very inadequately paid. Many of those people with whom we have to transact business get double and treble our salaries. *J. Dickinson, Esq.* 4 June 1866.

8365. Then you will have to turn miners?—Mr. Hedley has done so, and I believe that from two works alone, besides having private practice, he is in receipt of about two and a half times the amount of the largest sum that is paid to any of your inspectors. Only on Friday last I was called in to give my opinion as a set off against his in a case where he had been called in to support the coal owner, and I know that he is doing very well. It is a matter of surprise, in fact, to many of the mining engineers in the country how you retain the services of your inspectors.

Mr. ALEXANDER M'DONALD, re-called; and further Examined.

8366. *Chairman.*] YOU have something which you wish to add, I believe, about poundage?—Yes, I have a table containing a list of the truck shops and another with reference to the poundage. (*The same were delivered in.—Vide* Appendix.) Before entering on the subject I should like to explain a matter that arose in the examination of the inspector on the last occasion. He was asked the question whether there were three boys working belonging to the man called Shelley, and he stated that there were not; I immediately wrote down to the place, believing in the veracity of my correspondent at the time, and having knowledge, from having been on the spot myself, that the circumstance took place, I had an answer this morning, stating this, that three men are prepared to declare on oath that the three boys were at work, and the writer of the letter goes on to state that one of them was sent out of the pit that day by Mr. Moore. I did not wish to be under what seemed to be a charge of prevarication or of not stating the truth here; I wrote to my correspondent therefore, and I can put in, if it is desired, the statement from which I have just read, to show that the evidence which I gave was correct; those three persons are willing to declare, either here or before a magistrate, that Shelley had three boys at work, two of them being under age; one of them is working now, another is only working occasionally, and as I have already said, one of them was turned out of the pit that day by the order of the inspector. *Mr. A. M'Donald.*

8367. Mr. *Greenall.* The inspector being Mr. Moore?—Yes.

8368. Mr. Moore was asked this question by me: "Do not you know that in regard to the case of which you have already spoken, a third boy, Shelley, was employed in the mine; and do not you know that he was put out of the mine by order of his employer." The answer which Mr. Moore gave, was this: "His father told me that a third boy had been down some months before, just to keep him company, but that he was not engaged in working in the mine, and he told me that he put out no more coals on account of that boy being there, and derived no benefit at all from it." Is that the part of Mr. Moore's evidence to which you are now alluding?—Yes; my information on the statement of the three persons is, that the three boys were working, and that Mr. Moore sent home one of them on that day. I may just mention that in the case of a colliery which he reported as having got few complaints, I reported the colliery to him some time ago, and I have had a note this morning stating that two explosions took place, one on Thursday, and one on Friday last (the latter was the day on which Mr. Moore was being examined here), and I can give the name of the colliery if it is desired; Wilson's Wishaw, Lanarkshire.

8369. *Chairman.*] In regard to the system of poundage; that exists in Scotland, and not in England, I understand?—It exists in Scotland, and not in England.

8370. What is that system?—It is a system which grew up after the abolition of the truck system. A number of the masters had got ashamed of that truck system (though others have not yet), and adopted another principle, which is this: they give their men advances every week, or every day, it may be. They have established at their office a pay clerk, who give the advances to the men. If the men take less than 10 *s.*, then the masters take from them 1 *d.* in the shilling; and if they take more than 10 *s.*, they then take from the men at the rate of 1 *s.* in the pound. There are a great many collieries where that system is adopted; about one-half of the workmen nearly, in the country, are under a system of that kind, and it is felt to be very grievous by those that have to pay. The result of it is that for every shilling that they receive under 10 *s.* they only get 11 *d.*, and when they receive a pound, they only get 19 *s.* for it.

8371. I suppose they are consenting to that; it is a matter of contract and consent; the men know it, I presume, before they begin to work in the mines?—Yes, they know it perfectly well before they begin to work in the mines.

8372. Mr. *Liddell.*] It is in the nature of a discount for ready money payment, in fact, is it not?—Yes, but the money has all been earned before it is paid to the men; it is their own money, and yet the masters give them only 19 *s.* in the pound; it will be observed that in this way in cases where they pay fortnightly, if they only pay 19 *s.* for every pound advanced in the fortnight they get about 250 *l.* per cent. in the year for the money which they have so advanced.

8373. Mr. *Forster.*] How often are the settlements?—Fortnightly and monthly.

8374. Mr. *Liddell.*] But you said that the men were sometimes paid daily?—They can get their money every day at that rate if they like it.

8375. Mr. *Forster.*] By waiting the fortnight the men got their money in full?—Yes, by waiting the fortnight they get their money in full.

8376. *Chairman.*] And if they are paid at once they have to pay discount?—Yes.

8377. Mr. *Greenall.*] Will it not stand thus, that

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that a man goes to work and he is to be paid at the end of a fortnight; he knows the price at which he can borrow money, or at which it would be advanced to him before the end of that fortnight has been reached, and if the man wishes an advance before the fortnight has been reached, then he borrows money at these extravagant prices?—Yes, he borrows it at these extravagant rates.

8378. It is the man's own act to do it?—It is his own act so far, but the practice of giving those advances continually has a most immoral and deleterious tendency upon the habits of the workmen.

8379. In the first place it makes them very improvident; they know that if they work to day they can get their money at night with that deduction which I have stated, and the result of the practice is that many of them never work but when necessity compels them, knowing that they will get their money paid at once if they like; it is the effect that it has upon the families that we object to, rather than the large amount of interest which is taken from the men on those advances.

8379.* How would you cure this mischievous practice, for that it is a mischievous practice we can all see?—I would say, let the masters pay the men fortnightly or weekly; in the counties of Edinburgh, Fife, Mid Lothian, and Clackmannan, there is no such thing in practice, and a large number of the most respectable colliery proprietors do not adopt it, but it exists for the most part in certain districts in Lanarkshire and in Ayrshire; it is, also, the means of leading the men to be dishonest in this way: they go into the shops of the adjoining grocery dealers, or clothes dealers, or whatever they may be; they get into credit at those shops, and then knowing that they can get their money out every day they take it when they like, and they become law-proof in every sense of the term.

8380. *Chairman.*] You mean that the men get their money, and the creditor does not know that they have got it?—Yes, they get their money, and the creditor knows nothing of it. And moreover, by the intelligent workmen the present system is looked upon as a very serious evil to the moral state of the community.

8381. Mr. *Liddell.*] Then you are highly favourable, as I gather, to the fortnightly mode of payment?—Certainly, or weekly payment, but with no advances.

8382. It strikes me that I have heard complaints on the part of some workmen against the fortnightly pay as not frequent enough?—I think that it should be a fortnightly pay or a weekly pay, the fortnightly pay does perfectly well, and the industrious and intelligent body of the workmen are satisfied with fortnightly pay.

8383. That, then, is your answer as a workman to the complaints of those workmen who wish for it more frequently?—Yes.

8384. Mr. *Forster.*] Do not these deductions of which you have spoken rather tend to discourage the men from obtaining draws between the pay days?—No, they do not tend to discourage them; it is an increasing evil in the district.

8385. Mr. *Liddell.*] I presume that in the case of a man having a wife or children sick, or having distress of any sort at home, you would not object to his having his pay advanced?—An intelligent and industrious workman is generally in a position to meet such circumstances as those, but that would be a matter between him and his employer, and I believe no employer would refuse it.

8386. On those circumstances being shown to an employer, he would in hardly any case refuse, I presume?—I believe he would not.

8387. *Chairman.*] If a workman has to get credit at a shop for a fortnight or a month, or whatever the length of time may be, does he not pay a higher price in consequence of getting the things on credit?—I believe he does.

8388. Might it not then be as well worth his while to pay this discount to the employer, or whoever else lends him the money now, as to pay it to the shopkeeper?—I do not know that it would not be as well worth his while, but it is not the mere borrowing of the money that we object to so much as the effects which the present system has upon the habits of the people, leading as it does to irregularity of habits.

8389. You think, I suppose, that this money is not borrowed of the owner, or of the employer, for the purpose of paying off the shop debts?—No; not generally.

8390. It is borrowed for other purposes?—Yes.

8391. Mr. *Liddell.*] When a workmen has got a good round sum of money in his pocket, is he not so likely to waste it in foolish expenditure, as he is when he has only a few shillings in his pocket?—I think not; my experience goes to show that the less a man has, the more improvident he is with it; that is my distinct experience.

8392. *Chairman.*] Have you anything else to add?—Yes, I have something else to add with regard to the truck shops, that I did not state the last time that I was under examination here. I wish to draw attention to one thing connected with it, namely, the demoralising effect that it has. At the truck shops there are certain days on which they give larger advances of goods than on other days, and on these days, as early as two and three o'clock in the morning; and as early as one o'clock in the morning, women and children are to be seen assembling at these truck shop doors, huddling together, and waiting the arrival of the storekeeper at eight o'clock, and that is felt by the intelligent and industrious workmen in Scotland to be a great evil, as having a very immoral tendency upon the habits of the young. Then, too, at these truck shops, they do not carry on the business as they do in the case of other respectable grocers. The shopkeeper, or the servant in the store comes at eight o'clock, a.m. and, when nine o'clock a.m. comes he locks the door, even although there may be 100 sitting, waiting; and they have to wait till he has got his breakfast, because he knows that his customers must sit there for him. If they should not have been served by the time that his dinner hour two p.m. comes, then they have to sit there during the dinner hour, because he knows that his customers must remain for him. That is common at all the larger truck stores in Scotland.

8393. Your inference, I presume, is against all compulsorily dealing of that kind?—Yes; another matter that was not embraced in my evidence on the last day was this; that the present statute does not extend to certain mines in Scotland, and the workmen in England and in Scotland have one common opinion that the Inspection Act should extend to all ironstone mines, as well as coal mines, and also to lime pits. The other witnesses have not taken up that subject or entered upon

upon it, and therefore I wish to state that that is the feeling of the entire number of the workmen that I represent here.

8394. That question is now in dispute, is it not, at this moment before the judges. You have heard Mr. Dickinson say, have you not, that he went down on that very point?—That was a case where they worked in connection with coal.

8395. And you wish that the statute should apply also where there is no coal at all?—Yes, to ironstone mines where there is no coal at all. They are not visited now, and the inspectors usually say (and I know that they are right in saying it) that they are not within the meaning of the statute.

8396. You are of opinion then that there should be inspection over the ironstone mines, as well as inspection over the collieries?—Yes, that is what is desired by the working men.

8397. I presume that you know nothing about lead and tin mines?—I am not particularly acquainted with them, but I have visited them.

8398. You would extend the inspection to those, too, I presume?—Certainly.

8399. Mr. *Liddell.*] Have you any fireclay mines in Scotland?—Yes.

8400. Would you extend the statute to them?—I have never heard any complaints from them, but I know that explosions have occurred; at least I know of one explosion occurring in one limestone pit, and two persons being killed from it. But the ironstone mines, those thin seams to which I refer, although they have no fire damp, are generally more destructive to health because they contain large quantities of carbonic acid gas.

8401. *Chairman.*] And they are more difficult to ventilate?—They are more difficult to ventilate.

8402. Have you often been in the ironstone and coal mines of Scotland?—Yes, for 16 years I wrought in them.

8403. Have you done so recently?—About 12 years ago; but I have been in them often since that time.

8404. Are you in the habit of going into them?—Yes, I sometimes go down them for curiosity. I was in them when I was eight years of age.

8405. And ever since, more or less, you have been in them; is that so?—Yes, since the period when I took the position which I occupy now. I have been frequently down mines. Parties who have improved systems of ventilation ask me sometimes to go down the mines with others, and to examine them for myself. Managers that I am on friendly terms with ask me to go down sometimes, and I know thoroughly the working of the coal mines and ironstone mines in Scotland.

8406. How long is it since you inspected any of them?—About three years ago I was down one belonging to Mr. Merry. His manager at the work was a lad I learned to work in the mine, and I went down to see his pit with him, or rather to see two pits.

8407. Mr. *Greenall.*] Is that the last occasion on which you visited any of the pits?—No, I have visited one or two since that.

8408. Whose pits were they?—I was in one in Wishaw since that, and in one in Slamanan since that.

8409. *Chairman.*] Where is Slamanan?—In Stirlingshire; and I have been into a number of lead mines since that; and recently, when the Committee that Lord Kinnaird was president of was taking evidence, I was in the lead mines frequently.

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8410. Sir *Philip Egerton.*] Are you in the habit of going down coal mines now to inquire into the state of affairs there?—No, I am not in the habit of going down coal mines now, for this reason, that they will not allow me in the mines. The inspector, Mr. Moore, wished me to go down one recently, where there was a dispute about black damp, but the owner would not allow me to go down.

8411. Mr. *Foster.*] Your going down does not contribute to the harmony of matters, I suppose?—I do not know. It might contribute to the safety at all events.

8412. Mr. *Greenall.*] Have not you confidence in the judgment and experience of the inspectors?—I have perfect confidence in the judgment and experience of the inspectors, was that judgment and that experience duly exercised. I believe that the work is too great for them; that it is more than they are able to accomplish.

8413. Mr. *Liddell.*] Of course that is the ground upon which you advise so strongly the appointment of sub-inspectors to assist them?—Yes, that is the ground of my advocating that; I mentioned early in my evidence to-day that there was a colliery about which I had complained to the inspector, where there was an explosion on Thursday, and an explosion on Friday. In those explosions, six persons were burnt.

8414. I should like to ask your opinion on the question, whether there is a strong desire on the part of the workmen, in the event of the appointment of sub-inspectors being sanctioned by law, to obtain those situations for themselves?—I have not heard that desire expressed by any individual workman.

8415. Do you think that experienced workmen would be competent to perform the duties of sub-inspectors?—A certain class of experienced workmen would be competent for them, but it would be a very select few; a higher class of persons than are now acting as firemen or managers generally.

8416. But you are not of opinion, as I gather from you, that there are a great many workmen to be found who would be proper persons to appoint to these duties?—There would be a sufficiency found, I should fancy, but I think it should be a higher class than mere workmen; they should have more skill than a mere workman has; it would require an amount of training for the situation.

8417. Mr. *Greenall.*] You mean to say, then, that if an additional number of inspectors were appointed, you would have them very much the same kind of men as the inspectors now are?—Not of quite so high a standing; but I would have them much above the standard that the mass of firemen or managers or overmen now reach.

8418. A kind of intermediate animal?—Yes, a superior class to the present firemen and managers.

8419. *Chairman.*] When was the last time that you went into a mine?—Nine months ago.

8420. What mine was that?—It was a coal mine, which was entered from the air; what they call an ingoing mine.

8421. Sir *Philip Egerton.*] An adit?—Yes, an adit.

8422. *Chairman.*] When was the last time that you went down a pit?—Two years ago. I would have been down one three months ago if the owner would have allowed me.

 8423. You

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8423. You say that you were recently to go down with him?—Yes.

8424. Where was that?—In the county of Clackmannan.

8425. When was that?—In the month of November last.

8426. Then you were not allowed to go down, as I understand you?—No, I was not allowed.

8427. Who objected?—The lessee of the mine. The circumstances were these: The person was brought into court under a complaint, and the inspector desired that I should go with him to see the place, and he went to ask the lessee for permission, but he would not allow it.

8428. Mr. *Greenall.*] Did you first propose to the inspector that you should accompany him, or did the inspector ask you to accompany him?—The inspector asked me to accompany him, and then he went to Mr. Snowdon, the lessee, and asked him to allow me to go down, which was refused.

8429. Mr. *Liddell.*] Have you ever made an application to the owners or managers of a mine to inspect that mine, and been refused?—Yes.

8430. How many times?—I made an application at the time there was a burning of a pit belonging to Summerlee, called the Dyke Head Pit, in the Larkhall district, and was refused. There were 12 lives sacrificed in that case.

8431. Can you call to mind any other occasion on which you have been refused permission?—No, I do not call to mind any others now; I know that there are others, though I could not mention the circumstances now.

8432. Are you quite sure that at the time when you made that application of which you speak, the mine was not in such a state of confusion that you could not go down?—I am not aware whether it was in such a state of confusion as that or not.

8433. It was immediately after the occurrence of the accident, I suppose?—Yes, men were going down at the time.

8434. Others were going down, you mean, at the time?—Yes, others were going down at the time.

8435. Mr. Merry has asked me to put this question to you, whether you were ever refused access to any one of his mines?—No, I never was refused such access; I was asked by a man who was then his manager, but who is not so now (he was one of his underground managers), to go down with him, and I went down with him.

8436. *Chairman.*] You say that you were invited by Mr. Merry's manager to go down, and you did go down?—Yes, it was about an improvement in the ventilation. This manager had been brought up with me, and had wrought with me in the mine when a boy, and he wanted me to go down and see this improvement, and I went down with him.

8437. Mr. *Foster.*] Is it customary for proprietors of mines to allow strangers to descend their pits on application?—Yes, I have seen persons going down.

8438. But would not that be under peculiar circumstances?—Yes, it would be under peculiar circumstances.

8439. The owners of mines are not supposed to put their machinery at the disposal of any persons who choose to descend their mines, I presume?—Certainly not, and I would be very sorry to think that they should.

8440. Is there a special rule against it?—Yes, there is against descending as a workman without permission.

8441. Mr. *Liddell.*] Would you advocate an arrangement by which as a rule masters and managers should allow their works to be inspected by unauthorised persons?—No; I did not advocate that, nor did I propose the question. The question was put to me whether I had been down mines, and that was how it came out. I would consider what you have alluded to, to be a most irregular way of transacting business.

8442. Sir *Philip Egerton.*] But you have made complaints before this Committee, have you not, that you were refused access to these mines?—No; I did not make the complaint; the question was put to me.

8443. You mean then to say that access was refused, but you do not complain of it?—No; I do not complain of it.

8444. Inasmuch as according to your own evidence, you think it would interfere with the operations of the mines?—Yes.

8445. *Chairman.*] I understand you to have said what you have on that subject in answer to a question as to how long it was since you had been down a mine?—Yes; and I said that I should have been down more recently, had I not been refused; but I do not wish to be understood as saying that the refusal is a ground of complaint, because it certainly is not.

8446. Mr. *Greenall.*] And you do not wish to state broadly that the refusal was personal to yourself; but any person would be refused permission to go down in similar circumstances. If I had presented myself, for instance, on the pit's brow, I should not have been permitted to go down?—It might have been so. It was in answer to a question put to me, that I said that I might have been down more recently if I had been allowed.

8447. *Chairman.*] Did you not say that you had been invited by Mr. Moore to go down with him?—Yes; I was invited by Mr. Moore to go down with him.

8448. But you were refused in that case?—Yes.

8449. Was that refusal personal to you, or was it because you were a stranger?—There was another gentlemen along with us, and he was refused also.

8450. It amounts to this, that the owner said that the inspector might come down, but that no one should come down with him?—That was it. I have no desire to exercise any such power as to be permitted to go into the mines when I like.

8451. Mr. *Greenall.*] Take the case of those large glass works at St. Helen's, which you know as well as I do. If a gentleman presented himself at the door of those works, he would not be allowed to enter, I presume?—No.

8452. And it is precisely the same in regard to collieries?—Precisely the same; strangers might be the means of injuring themselves, and might be a cause of danger to others.

8453. Mr. *Liddell.*] And very often there is an announcement over the doors of such works, "No admittance except on business," is there not?—Yes.

Thursday, 7th June 1866.

PRESENT:

Mr. Ayrton.	Mr. W. Orme Foster.
Mr. Clive.	Mr. Greenall.
Viscount Cranborne.	Mr. Kinnaird.
Sir Philip Egerton.	Mr. Liddell.
Mr. Fawcett.	Mr. Neate.

CHARLES NEATE, Esq., IN THE CHAIR.

JOSEPH DICKINSON, Esq., recalled; and further Examined.

8454. *Chairman.*] I BELIEVE that, at different times, you have visited foreign coal mines?—I have.

8455. Where?—Chiefly in Belgium, and also in France and Germany.

8456. Sir *Philip Egerton.*] What part of Germany?—Those mines near to Dresden, where the thick coal is worked, and also at Dortmund, Essen, and St. Jean de Saarbruck.

8457. *Chairman.*] Are you acquainted with their regulations as to the employment of boys?—In Prussia there is the general regulation of the country with regard to education; I think that boys in every occupation in that country are supposed to be able to read and write.

8458. But can you speak as to the age at which they are first allowed to be employed in mines?—I am not quite sure as to the age; the Belgian mining laws really go so much into detail, that they form a very large volume; the restrictions extend to almost everything, even to the pressure of steam at which boilers of a certain diameter, and thickness of plate, may be worked.

8459. Are these mines which you are speaking of, Government mines, or worked by private enterprise?—They are all worked by private enterprise; by very large companies, called societies.

8460. How are these minute regulations enforced?—There are inspectors.

8461. Do the inspectors frequently visit the mines?—Much in the same way as we do in England.

8462. Do you mean that they do not interfere more in the actual management of the mines?—Yes, they do interfere more than we do; the governments have a greater control over the mines on the Continent than the Government of this country have; the governments there stand somewhat in the position of the lessors of mines in England.

8463. When you say the Continent, are you speaking of France, Belgium, and Germany?—Generally of all, but especially of Belgium.

8464. You are speaking more particularly, then, of Belgium?—More particularly of Belgium; that seems to be the most advanced country on the Continent with regard to coal mining.

8465. What do you mean when you speak of the Government there being in the position of lessors?—The actual landowner who owns the coal receives such a small rental for the coal that it is only in a few instances that it is worth his while to receive the royalty rent.

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8466. You mean that the Government claims the control over the minerals?—Yes, they do.

8467. Do you refer to Belgium now as well as to France?—Yes.

8468. A small payment is made in a way of royalty to the owner?—So small that it is seldom applied for.

8469. Then the Government is virtually the owner of the minerals?—It may be so said.

8470. And lets them to private companies or individuals?—Exactly so.

8471. And therefore it is in a position, is it not, to exercise a greater amount of inspection; it has not only the right of a Government, but the right of an owner to inspect?—That is so.

8472. Should you say that in consequence of that close inspection, the mines are better managed?—I have no doubt that the inspection there does good; and taking the mines generally of both Belgium and France, they are all up to a certain average, they are nearly all pretty much alike. But their best managed mines do not come up to our best managed mines in this country, and I have not seen any of their mines so badly managed as some of our worst managed mines.

8473. Should you say that their average was higher than our average?—No, I should say not.

8474. Comparing the two systems with reference either to the protection of boys or to the protection of the miners from want of due precaution on the part of the owners, which should you say would be the best?—I think that looking at the freedom of thought which the people of this country are accustomed to, our system suits this country better, but I am not prepared to say that our system would suit their country better.

8475. As to ventilation, should you say that their mines have to contend with the same difficulties as we have to contend with in this country?—Very much the same.

8476. As to the depth of the mines, which mines are the deeper?—The Belgian mines are deeper than any mines that we have in this country.

8477. Have they a liability to explosive gas?—The same liability to explosive gas as we have in our mines. Their regulations on that point are exceedingly strict; they will not allow any

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air which has passed where there is fire damp given off in the mine, to be brought down hill again. Every air current in a fire-damp mine must go in an ascending current until it is delivered out at the upcast shaft; and it must not go over a ventilating furnace.

8478. The air starts from the lowest point?—From the lowest point, and passes up by what they call ascensional ventilation; and looking at the small currents of air which they have to deal with, that plan does seem admirably adapted for their mines and for the mode in which they work their mines.

8479. Why have they a smaller current of air to deal with than we?—I can scarcely tell you why, but such is the fact. They seem to think it cheaper to have smaller airways.

8480. When I asked you why it was that they had a smaller current of air to deal with, it was rather as to the *modus operandi* that I asked you than as to their intention. They have smaller air currents because they have less furnace power, I suppose?—That is one reason; the furnaces in that country are very few, and those few that they have are giving way now to mechanical power.

8481. But the airways are smaller than ours?—They are.

8482. Their system is to make up for the want of volume, by greater care in the circulation of the air?—Yes; and for the small airways by having greater ventilating power.

8483. By greater rapidity?—By an application of more power to pull the air through the mine.

8484. Which increases the rapidity of the current, I presume?—Just so; then in their furnace shafts they prohibit men from riding up and down.

8485. You say that they are now abandoning the furnace shafts in Belgium?—To a great extent they are, but there are still a few left.

8486. And they are supplying propelling power in their stead?—Chiefly exhausting power.

8487. Sir *Philip Egerton.*] Suction pumps?—Generally suction pumps and fans; the air is sometimes propelled, but it is more usually to exhaust.

8488. *Chairman.*] Comparing their system with our system of furnace shafts, which would you say was the best?—As I have told the Committee, I do not like riding in deep furnace shafts where there is a large amount of furnace power, and a number of steam-boilers, at the bottom, in that respect, therefore, I consider their system best.

8489. Speaking, not with reference to the riding, but with reference to the ventilation; do you think that their exhausting suction pumps are as good a means of ventilation as our furnace shafts?—For deep shafts where the furnace is efficiently applied, I think it will be found that the furnace power is more economical, more advantageous, and more certain; but for shallow pits, mechanical power will be found more economical and advantageous, and I think we may look for an extension of the ventilation of mines by mechanical power in this country.

8490. Suction power, you mean? — Suction power, by mechanical appliances.

8491. Mr. *Liddell.*] You said that the Belgian Government claims the property of the mines; that is the recognised law of the country, I presume; that is to say, the law recognises their property in the mines?—Yes; they have a control over the mines there which the Government of this country has not.

8492. But claiming the power of control is a different thing from the law recognising actual property; am I to understand that the Belgian law recognises that the Government has an actual property in the mines?—I think it does; and that the landowner has so small an interest that the royalty rent payable to him is very seldom worth his taking the trouble to receive it.

8493. You are not aware whether that extends to any other description of real property in Belgium, are you?—I am not.

8494. Is it an improved method of working which they adopt in Belgium?—The only mode of working, in Belgium, is longwork.

8495. You mean the longwall system?—Yes; they take all the coal away before them, and they must work the coal in a descending order, taking it generally in depths of about 30 yards at a time; they would not allow a shaft to be sunk as in this country, and to work the lower coal out first, without the consent of the inspector in writing, and that consent is very seldom given; one of their inspectors told me that he never gave it but once, and that he did not sleep soundly till he knew that it was finished.

8496. Have you ever heard the reason which they urged for that prohibition?—It is because by having ascensional ventilation, and the small quantities of air which they deal with, the gas is less likely to accumulate than it would be if you were drawing it downhill, owing to its being lighter than air.

8497. Then it is from motives of security that they adopt that plan?—Yes.

8498. You said that their mines are considerably deeper than anything in this country?—Yes.

8499. And that their mode of ventilation as compared with our furnace power is more costly?—I said that mechanical power is more generally applied, not that it is more costly.

8500. I understood you to say that, as compared with our mode of ventilating by means of furnace power, it was more costly?—For deep mines, and with the furnaces applied so efficiently as we have them applied in this country; I think there is nothing so economical, so steady, and so reliable as the furnaces; but I think that for shallow mines in this country it will be found that mechanical ventilation will be both cheaper and better than the furnace, and that is why I look for an extension of mechanical power here; at the present time it is only applied to a very limited extent amongst us.

8501. But coupling the two facts, that the Belgian mines are on the average deeper than ours, and that their mechanical appliances for the purpose of ventilation are more costly, I want to arrive now at the very important fact, how that affects the price of Belgian coal; do you know the average price at which they deliver coal at the bank?—I could not go into the prices of coal there; but generally I may say that the Belgian coal will be dearer than the English coal because their coalfield is very much twisted and contorted; I have myself travelled in mines in Belgium, where if a shaft had been sunk from the surface it would have gone through the same seam three times; and that is very general, both in Belgium and in the northern part of France, about Valenciennes.

8502. Then the natural difficulties attending the

the working of coal in Belgium are very much greater than in our country?—Yes, they are.

8503. Is that invariable?—Yes; you may take it as being general through the Belgian coalfield. Besides, near St. Gilly, there is one of their shafts which is upwards of 1,000 yards in depth.

8504. Do they export by sea to any considerable extent?—I am not aware that they do; there are very extensive manufactories in Belgium; they are a most enterprising people, and they appear to be the people most like the English in their manufacturing tendencies of those I have met with on the Continent.

8505. The great "usines," as they are called at Liège, are to a great extent in the hands of Englishmen, are they not?—Mr. Cockerill is an English name there.

8506. You said that the air currents there are much smaller than ours, are the dimensions of the shafts less than ours?—There are various dimensions of shafts, but I never yet saw a furnace there carried out in the same efficient way in which they are carried out in this country.

8507. I understand you to say that the exhausting process, by mechanical appliances, is less efficient to produce a steady current of air than furnaces?—Some are so, but with some of their mechanical appliances they can get up the water gauge as high, or higher than by furnace power.

8508. How is that exhaustive process carried out?—There are a variety of exhausting appliances; the system of Monsieur Fabry is in general use, but the most modern and apparently the one doing the duty best, is one by Monsieur Guibal.

8509. Could you describe it to us shortly?—Monsieur Guibal's simply consists in applying contraction to the part when the air is delivered from the fan; that seems to me to be the principal and almost the only point, but he does attach also some importance (indeed considerable importance) to having the outlet for the air, after it has passed this point, gradually increasing like a bell mouth.

8510. I suppose he begins by creating a vacuum?—With an ordinary fan.

8511. Mr. *Ayrton.*] It creates a vacuum in the same way as the pneumatic dispatch, does it not?—The pneumatic dispatch, as carried out by Mr. Rammell, is on the plan that the late Mr. Brunton, of this country, brought before a Committee of the House of Lords in 1849; that is one of the best ventilating machines that I know. It is durable, and utilizes a very large amount of power.

8512. This fan creates a vacuum precisely in the same way that the furnace creates a vacuum?—It draws its supply from the mine.

8513. And it draws the air out; they both equally ventilate by the exhaustive process?—Yes. If you take the air out at the upcast shaft, it must go in at the downcast shafts; as regards mechanical ventilation, Mr. Atkinson, my colleague, and myself have been engaged for some time past in testing every kind of ventilating machine, not only on the Continent, but in this country also, and we have not yet finished our report on the subject.

8514. Would not the real advantage of a machine over a furnace be this, that the machine enables you to increase the intensity of the vacuum, whereas the furnace practically limits it?—Yes, unless a very high temperature be produced with the furnace.

8515. The ordinary temperature limits the exhaustive power of the furnace, but in the other case, you can intensify the vacuum considerably more, you can make the fan larger or quicker?—Yes, you can get any amount of vaccuum by mechanical power.

8516. *Chairman.*] For whom are you making this report to which you have alluded; is it for the Home Office?—It will be made to the Home Office.

8517. When is it likely to be ready for presentation?—I hope soon; there is a large fan now being erected at Stavely, and one in the county of Durham; which we wish to test before completing our experiments.

8518. Mr. *Liddell.*] When did the Government direct you to make this report?—It is now perhaps three or four years since, and we have been taking every spare opportunity that we have had during that time.

8519. Could you state whether the Belgian Government derive any considerable revenue in the shape of profit from the working of these mines?—I am not prepared to answer that.

8520. Mr. *Ayrton.*] Is there not in the furnace ventilation, a danger that, as the apparatus is practically of a fixed power and the workings increase rapidly underground in some of the mines in proportion to others, there is apt to be a deficiency of ventilation when you rely entirely upon the furnace?—We do not find that in this country, where you keep large airways.

8521. But on the other hand, if the upcast shaft is of definite dimensions, then you are limited to that?—Of course there is the friction of the upcast shaft; there is a theoretical limit to the quantity of air that could be sent up a shaft, by rarefaction, but that temperature is never reached in shafts, only in very hot chimneys.

8522. Do you consider that the power of the upcast shaft and the furnace is always so much in excess of the possible extent of workings in the mines, as to admit of the immense workings which in some of the mines extend underground for a great distance?—Yes. We have instances of old shafts; for instance, I know of a pair of eight feet shafts, where the ventilation is 100,000 cubic feet a minute; the airways have to be kept exceedingly large in that case.

8523. It is rather difficult, you think, to lay down any general rule, as to the expediency of using or not using mechanical means of ventilation?—It must be left to the mining engineers.

8524. Or it must be done upon some basis of the necessary supply of air in proportion to the size of the workings?—The Act requires adequate ventilation to be produced, but it very properly leaves it to the owner to produce it in the way which he finds best.

8525. You think that all that is necessary for him, is to be obliged to produce a certain amount of ventilation?—Yes, I think so.

8526. On the other hand, it ought not to be an answer to a complaint, that he is carrying on his own process efficiently, if he might employ a still better process, I presume?—He must get the air, but I would say, let him get it how he can.

8527. Have you applied your mind to the exact amount of instruction required by the Belgian Government in those persons who take the management of their mines?—They have to pass through the Mining College.

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8528. Are you aware of the college at Liège?—Yes, and also of the one at Mons.

8529. Does their system of instruction produce competent men?—I think you may lay it down as a rule that nearly all the Belgian mining engineers are clever, scientific men.

8530. They are required, are they not, to be qualified by the college?—They take grades; they are either élèves, or they are under élèves; they all have a rank.

8531. But is every person who is engaged in the duty of superintendence of a mine, compelled to have some certificate of qualification?—I am not sure that they are compelled, but they nearly all appear to have it.

8532. Do you know whether there are any subordinate mining schools, where an inferior course of instruction is given to that of the college?—The only mining school that I have been at is that at Liège, but I know that there is one at Mons also.

8533. Do you know whether there are any subordinate schools which carry technical instruction to a less advanced degree than those colleges?—I do not know.

8534. Are you aware whether there is any school or college in England which undertakes to give that technical course which is prescribed in the Liège College?—No, nothing like what they have on the Continent; we have the Jermyn-street Mining school here.

8535. That does not go through the whole course of the College of Liège, what is called the technical course I mean, but it only teaches a particular part of it?—Just so.

8536. *Chairman.*] Is the appointment of their subordinate officers subject to any approval by Government; or is the lessee of the mine at liberty to appoint anyone as viewer, or underground viewer?—The men that appear to have the practical working of the mines are appointed, so far as I am aware, by the owners of the collieries.

8537. And are not subject in their appointment to the inspector's approval; is that so?—I am not aware.

8538. Mr. *Liddell.*] With regard to relative prices at a given place in France (we will take Rouen), for example; have you made any inquiries as to the relative price at which Belgian coal is delivered at Rouen, as compared with English coal?—No, I have not; I have only gone into the matter as to the working of the mines, not as to the mercantile part of it.

8539. You are not aware, then, whether any large quantity of English coal is consumed at Rouen?—I am aware that there are very large quantities of English coal sent to France to different ports, not only Rouen.

8540. A considerable quantity goes even to Paris, does it not?—To Paris, and Bordeaux, &c. also.

8541. You are aware that there are two distinct zones, if I may so speak, in France, within which the rates of duty vary?—The sale of the coal is really not a point that I am prepared to give evidence on.

8542. Mr. *Greenall.*] You, knowing so well the character of the mines, and the prices at which the coal is sold on the Continent, compared with England, do you consider that there is a larger or a smaller profit?—I think that some of the Belgian coal is sold to a considerable profit.

8543. Mr. *Ayrton.*] With regard to the workings 1,000 yards deep that you spoke of, are those for the purpose of working strata nearly vertical, or strata which are comparatively flat?—They twist about in a variety of directions.

8544. Then they are practically vertical strata which they are working at that enormous depth?—The section is twisted, pretty much like a flash of forked lightning.

8545. *Chairman.*] Is it easier to ascertain and test the efficiency of the ventilation when the ventilation is by mechanical means than when it is by means of a furnace?—It is just as easy in the one case as in the other.

8546. As to the descent, are there on the Continent any contrivances for the protection of men that we have not in this country?—They have what they call the "Fahrkunst," that is to say the man-engine very efficiently applied, which we have not in our coal mines, only a few in the Cornish mines.

8547. On the Continent is the safety apparatus generally used?—Not nearly so often as it is in my district in this country. A great many of the men go up and down ladders in some of those continental mines, which would never suit our country; our coal miners do not like ladders in deep pits.

8548. Comparing the two countries in that respect, with regard to the facility of ascent and descent, you would say, then, that the superiority is on our side?—I think it is, and our shafts are better cased.

8549. As to the chains, have you made it your business to inspect their winding apparatus?—Yes. They generally use either hemp or wire ropes.

8550. Comparing their practice with ours, on which side is the superiority?—I think that our winding arrangements will bear comparison with any.

8551. Do you think that there is greater care in protecting the chains and ropes than with us?—I think not.

8552. Then, comparing the two systems, you have no particular suggestion to make as a change for our adoption in England?—I have not.

8553. Mr. *Liddell.*] Do they manufacture their own wire rope?—I am not prepared to answer that question. I have never seen any works where they do that; but both in iron and in glass the Belgian works are treading closely on our heels.

8554. Do they manufacture a great deal of iron in Belgium?—A great deal.

8555. Have they a large extent of ore of their own?—A large extent of hematite ore in the mountain limestone, which they work at a cheap rate.

8556. Then, I suppose, they import some also?—I do not know that they import any.

8557. Do you know whether they work their shallow seams in connection with their wide seams extensively in the same shaft?—In the same shaft there are by-tunnels or cross-measure drifts, generally several seams worked at the same time.

8558. As compared with ours, are their thin seams more difficult to work?—I have never seen a thick seam in Belgium.

8559. What is the average?—I do not think that there is a single seam above four feet in thickness, and the great bulk of them are from two to three feet; in Prussia they have thick

seams,

seams, and in the South of France they have seams 60 and 80 feet in thickness, but they lie very unevenly; they are not perfectly stratified; it may be 100 feet at one place, and then gradually thin down to only 20, and then spread out again to 60.

8560. Are the seams in France liable to the same contortions as in Belgium?—They are in the Valenciennes coal field, which is a continuation of the Belgian coal field, and which at the western side of Valenciennes they go down to through the chalk; then in the south of France they are about one in three, but not so contorted.

8561. *Chairman.*] Are you aware whether, in some of the French coal mines, they employ discharged convicts, that is to say, men who are quite free, but who, not being able to get work in other occupations, have only facilities of getting employment in the mines?—I do not know that.

8562. Mr. *Greenall.*] Are lamps in which oil is burnt used in the mines in your district?—Yes, extensively.

8563. In those mines where oil is burnt, do you not consider that the vapour from the oil lamp is such as to be injurious to the health of the men?—To a very limited extent; perhaps in a badly ventilated mine it would be so, but if you have 50,000 or 100,000 cubic feet of air a minute running through the mine, the quantity is so large that it would dilute the foul air resulting from combustion.

8564. Have you ever found it your duty to complain of the use of lamps?—The workmen generally dislike to work with safety lamps in my district, and the objection almost invariably comes from them more than from the masters, and that is one of the objections they urge that it makes their place so much warmer than a candle, that it affects the eyesight and makes it less healthy for them, and that the light is insufficient.

8565. *Chairman.*] You have seen those lamps which are partly safety lamps, and partly on a level with the flame?—You allude to the Museler lamp; I think that it is the best lamp in use; that is the lamp which is generally used in Belgium.

8566. It is used in England too, is it not?—Only in a few collieries.

8567. By the workmen or by the firemen?—By the workmen in some collieries.

8568. In what collieries?—In the new British collieries at Ruabon, and, I think, at the Duke of Newcastle's collieries at Shireoaks; and there are some in my district at Clifton.

8569. And you would recommend that for general adoption, as I understand you?—I give the preference to it, but there are others who give the preference to the Stevenson lamp, because they think it is safer; and the men generally give the preference to the Davy.

8570. Why?—For one reason, because if it falls on its side it does not go out, which the Museler lamp does.

8571. But the Museler lamp gives a great deal more light than either the Davy or the Stevenson, does it not?—Yes, one Museler gives as much light as three Davys.

8572. It is liable to crack when water falls upon it, is it not?—I believe where statistics have been taken, as they have in Belgium, over many thousands of lamps, it is found that the breakages of glass, from all causes, are very much fewer than the breakages of gauze.

8573. Have you seen Mr. Ansell's process for ascertaining the presence of fire damp?—Yes, I have; I should say, that the safety lamp is a most efficient test for gas, and that with the safety lamp there is no difficulty whatever in ascertaining the presence of either explosive gas or carbonic acid gas.

8574. Mr. *Ayrton.*] The object of the test apparatus would be to ascertain whether there was a necessity for introducing the safety lamp at all, would it not?—The candle is quite as efficient a test for fire damp as the lamp, only less safe, and is an efficient and safe test for black damp.

8575. Do you not think that it would be much safer to have some instrument such as that, for testing the presence of gas?—I am always open to accept any improvement that comes, but, at present, I have not seen any improvement upon the safety lamp, and as a test for fire damp and black damp that is always sufficient to show where men can go; and you could not use Ansell's process in the mine without having the safety lamp with you to give you light. He does propose to place some balloons in the airways communicating by wires to the office, to let the managers see the state of the return air, but they would be practically useless.

8576. Mr. *Liddell.*] Have you made any inquiries as to the relative rates of wages that prevail in Belgium and England?—The Belgian wages are very much smaller than in this country.

8577. What is the maximum that a good workman can make in hewing coal in Belgium?—I think that in round numbers the wages in Belgium will not be half the wages in this country.

8578. Are they paid by weight or by measure?—That is a point that really, if I have noticed, I have forgotten.

8579. Do they work by the piece, or by the day?—I believe it is all piece-work with regard to colliers; but I would not be quite sure about that; it was a point upon which I really had no business to make inquiries; and when you visit strange mines, you like to confine yourself in your inquiries pretty much to what you think they will not regard as too much prying.

8580. It is of importance in this way, though we understand that owing to the natural difficulties of working coal, through the increased depths at which it is worked, the price of coal might naturally be very high, the price will be materially affected by the low rate of wages?—Yes, the difficulties which they have to encounter in regard to the faulty nature of their coal field is such, that I think they will never be able to raise coal at so low a figure as we can produce it at in this country.

8581. You have never, perhaps, made any accurate comparison of the relative disadvantage under which they labour from natural causes, and the advantages which they derive from the low price of labour?—I should say that the advantages they get from low wages are more than counterbalanced by the advantage that we possess in the regularity of our coal fields. It is only in the Somersetshire coal field in this country that we have the same overlapping.

8582. *Chairman.*] What are the usual hours of labour in mines in Belgium and France?—I could not give you that information.

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8583. Mr. *Greenall.*] Are their women employed underground?—Yes, there are women in the mines.

8584. Do you know whether that employment of women is looked upon with disfavour by the men?—I do not think that it is looked upon with disfavour by the men; but I think it is wise with us to prohibit the women from working in the mines. I am a strong advocate for letting a woman work while she can on the surface; and I trust until the women in this country can get other means of livelihood, they will be allowed to do so. The men work in the pits partially naked; and in a few instances some of the men are entirely naked, and the places of work secluded; therefore I do not desire that women should be allowed to work down the pits.

8585. *Chairman.*] But in Belgium you say they do?—Yes.

8586. Mr. *Ayrton.*] At what occupations are the women employed there?—Waggoning and filling; generally waggoning.

8587. Mr. *Clive.*] You gave an answer last Monday, I think, as to the weighing clause. I reminded you of the discussion which took place on the occasion when that clause was introduced; and I stated (and you agreed in that view) that the weighing clause, as it stood, was a compromise—that the men wished for an absolute prohibition of any other mode but weighing, and the masters rather took the contrary view of it; and it ended ultimately in that clause?—I believe it was a compromise, and it looks to me sufficient for the purpose.

8588. Is it your opinion that the men, at that time, were satisfied with that compromise?—I understood so; but I think that it should not be in an Act relating to safety, and I should be glad, therefore, to see it taken out of the Act; it has no more to do there than a clause would have saying how you shall measure a bricklayer's or any other work.

8589. Mr. *Ayrton.*] Has not Parliament legislated for the benefit of the consumers of coal in London, that the coal shall be delivered to them by weight, and not by measure?—I believe so.

8590. Are you aware that it is penal to attempt to deliver coal to a consumer in London, by anything but weight?—I understand so; but that is a somewhat different case from this. That is as regards the public, and this is a question of the relation between master and servant, and these bargains should be left, I think, to be made between the master and the servant.

8591. Do not the cases fall under the same principle. The seller of coal, in London, is always over-reaching the purchaser, and therefore Parliament compels him to deliver coal to the purchaser by weight. If it is alleged in the mining districts that the lessee is always over-reaching the workmen, would that not be equally a case in which Parliament might compel the lessee to pay the workmen by weight?—You may leave that safely to be arranged between the master and the workmen, I think. The workmen have now very great power indeed; and independently of that, I believe that if any large number of workmen (not even a majority) were to go with a proper request to a colliery owner in my district, and were to say to him that it was their wish the coal should be weighed and not measured, he would comply with that request.

8592. If you have not been able to leave it in that way to the intelligent action of the person who are interested in the question in the metropolis, and who are generally persons of education and property, why should you be better able to leave it to the intelligent action of the persons themselves in the mining districts, who are not necessarily the best educated?—There are difficulties in the way of the relations of a master to a workman, which do no apply to coal being delivered to a consumer; the same carts which deliver coals to a consumer deliver loads day by day, and the weight of that particular cart is known, but where coal is taken from a colliery, there are many hundreds of tubs coming out, not going to the same workmen each day, and each tub not being always of the same weight, and to have to weigh each empty tub would be an endless trouble, and the only way in which you could arrive at it would be to take the average of these tubs; if they happen to go through water in the pit, or if it is a wet day, the weight of those tubs will be increased, or if the coal becomes wet it will weigh more; taking the measure of the coal sent out by colliers is therefore, perhaps on the whole, as fair a way of deciding the matter as between the master and the miner as weighing would be; but as I told the Committee, on the last occasion when I was before them, I should prefer weighing, inasmuch as I think it the fairer plan if it were not for the trouble.

8593. Is there any difficulty when the tram is made in stamping its weight upon it; in stamping it in upon the iron even, so as to distinguish the tare and net weights; are any of those difficulties experienced when other interests require it; is not that a difficulty that would operate in the railways, and yet do they not all manage to mark the weight of their railway trucks so that at once by weighing the truck you can ascertain what the net load is?—That, of course, would be the accurate way of doing it with regard to the weight of the tram, but it does not meet the question of moisture that I have spoken of, and practically that system is not carried out in collieries; the weights carried upon the railway are several tons, whereas the weights sent out by ordinary tubs from the colliery are generally 6 cwt. to 8 cwt., but where the tram of coals is about a ton, as it is in some parts of this country, I think the system is universally to weigh; for instance, in South Wales, at Sir John Guest's colliery, I never was accustomed to anything but weighing every tram of coal sent out of the pit, but the weight of the empty tram was arrived at by taking an average.

8594. Did you ever see any weighing machines at the collieries so constructed as never to weigh more than a certain quantity?—No, I do not believe in any such deception on the part of any coal owner in this country; such a thing would be scouted by them all.

8595. What makes you suppose that that clause was accepted as a compromise on the part of the workmen?—At that time the delegates appeared in great force in London, and the coalowners also appeared in great force in London; and Mr. Clive who was then the Under Secretary, and had charge of the Bill, asked myself and Mr. Hedley to advise him as to certain points as to whether such and such concessions could be made without interfering, as we thought, with the utility of the Act. Being in London at that time, I was made aware with what was going on, and the impression which was left on my mind was, that that clause

clause was considered satisfactory by the workmen.

8596. Is it within your recollection that the clause was struck out altogether in the House of Lords, and then put in again?—Yes, it was put in again at the last moment.

8597. That, in point of fact, the workmen were obliged to take what they could get without having any opinion of theirs taken into account at all?—That might be, but, as I say, I should like to see the clause struck out of the Act, inasmuch as I do not see that it has any place in the Act.

8598. Are you aware that the Bill in the House of Lords was very much in the hands of the coal proprietors?—I think that the men were not without friends there also, as they succeeded in getting some clauses reinstated at the last moment which had been deliberately struck out in Committee.

8599. *Chairman.*] Do you mean struck out in Committee of this House, or in Committee of the House of Lords?—In Committee of the House of Lords. As I have said, there are only two collieries in my district where weighing has been tried; at one of those, the Bower Colliery, they have given it up in order to please the men, and the coalowner would be glad to go back to it, but generally there is an objection to it.

8600. Mr. *Ayrton.*] Are there not other Acts that have been passed which make the delivery of goods by weight compulsory, where it is found necessary for the general protection of those who engage in business; for example, in regard to weighing corn and other matters?—I think that there is too much meddling with these matters; the men should be left to make their own bargains with the masters.

8601. Is a person practically competent to make a bargain for himself where there is an organised industry; has anyone individual man power to make a contract for himself in such a case of organised industry; has he not the alternative of starving or taking the organised industry as he finds it, and is he not as complete a slave as if he were the subject of positive legislative penalties compelling him in the matter?—If he were an individual alone it might be so, but by means of their unions the men have immense power; so much so that at one colliery, at which I was very recently, the manager told me, when his underlooker came up the pit and said that 30 men (naming about 30 of the workmen) had just had orders either to join the union or the pit would stop, "I must let those men join the union, and be supposed to know nothing about it."

8602. It is your view then, is it, that it is preferable for the workmen engaged in the mine to meet, and for the majority to make a law rather than for Parliament to consider the question and make a law for them?—I think that you may safely leave it to the men themselves; they will see to their own rights.

8603. But in throwing out that suggestion you recognise the principle, do you not, that a body of workmen employed in the mine should be a parliament for themselves; so that a majority shall make a law binding on the minority to regulate their interests; that becomes a necessity, does it not, if Parliament does not interfere?—I do not think it necessary to bring such a mighty machine as Parliament in to say whether they shall be paid by weight or measure.

8604. Still you recognise the necessity of the lesser parliament of the men themselves interfering to regulate the matter?—I think that the unions, when kept under control, have done a great deal of good in the way of giving the working men their rights. *J. Dickinson, Esq.* 7 June 1866.

8605. Your view is, that it is preferable for the men themselves to make laws on the question rather than Parliament?—I should leave it to the men.

8606. *Chairman.*] I understand you to say that the trades' unions are a proper means for the protection of the workmen?—When they are kept within proper limits.

8607. One of the causes of trades' unions combining for the purpose of saying whether weighing or measuring is the fairer is, that the legislative protection is, in their opinion, insufficient, is it not?—I do not see that it implies that the legislative protection is insufficient.

8608. Mr. *Clive.*] Are not the trades' unions principally concerned in questions of wages?—Almost exclusively.

8609. And are wages a subject for Parliamentary interference?—I think not.

8610. Mr. *Foster.*] Would you consider it a fair exercise of power for a trades' union to bring their influence to bear to compel certain men in a pit's company to belong to the union?—No; I think that the instance which I mentioned just now, in which the 30 men were told that they must join the union, or that the whole of that colliery should go on strike, was an abuse of power on the part of the workmen.

8611. Do you think that those acts of tyranny are frequently resorted to by the trades' unions?—I am afraid they are too often resorted to.

8612. The trades' unions, therefore, are not altogether, in your opinion, an unmixed good, I presume?—They are not.

8613. Mr. *Greenall.*] You give it as your opinion, as I understand you, that through the agency of these unions (for the moment not expressing any opinion whether they are good or bad) the working men are able to take care of themselves?—I think so, and I think that, on the whole, the unions do good. The masters have the power to combine against them if the men are exceeding what is right and good, and these two powers, capital and labour, should be left to themselves, I think. It is quite fair that the working man should get what he can for his services, and that the coalowner should take care that the working man does not take too much from him.

8614. Would you go so far as to say that these trades' unions are necessary, without committing yourself to saying whether they are good or bad?—I think that trades' unions are necessary evils.

8615. Mr. *Ayrton.*] If the employment of the men is to be regulated by a union, would it not follow that it is a legitimate proceeding to require that the men should belong to the union?—No, I think it is tyranny when it gets as far as that.

8616. If the employment of the men in a mine is to be regulated by the union, it would follow, as a consequence, would it not, that all the men employed in the mine must conform to the rules of the union?—The union does not refer to any particular mine; it refers to the men.

8617. Take it with reference to the organised labour in that district or in the individual mines?—There

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—There may be a powerful union in a district, and yet some of the largest coalowners may not allow a single union man to be employed in one of their mines.

8618. But if I rightly understood you to say that you did not think that Parliament should interfere in this question because the union of workmen was the machine by which the regulations should be made, would it not seem to follow that all the men employed should conform to the laws of the union, as those laws are to be substituted in your view for the laws of Parliament?—Certainly not; I should let a man have free action, either to join the union or to keep out of it.

8619. *Chairman.*] Do I rightly understand you to carry your objection to the interference of the Legislature so far as that you object to that clause in the Act which empowers the workmen to appoint a man on the bank to take note of the weight of the coal?—I think that it has properly nothing to do with an Act for the inspection of coal mines.

8620. It is in the Act as a matter of fact?—It is, but it is contrary to the spirit of the Act, and it is contrary to the preamble of the previous Act.

8621. Then as a matter of your own opinion, you would object to that clause in the Act?—I do; it is a commercial matter which is intruded into the Act, improperly, I think.

8622. Mr. *Liddell.*] In the event of a man, or any body of men, differing in opinion with the union upon any particular point, you are of opinion that they ought to be allowed free action to decide whether or no they will conform to the wish of the union?—Certainly.

8623. May not things come to such a pass, and in fact have they not come to that pass in some cases, that the law has actually been obliged to be called in to protect these men from the tyranny of the combination?—I have seen instances where the union itself has appeared to be a very great tyranny over the working men, where the delegates have not carried things out with great discretion.

RALPH MOORE, Esq., recalled; and further Examined.

R. Moore, Esq.

8624. *Chairman.*] THERE is one point, I believe, on which there seems to be a little discrepancy in the memory or information of yourself and Mr. M'Donald?—Yes.

8625. I believe you wish to set right a matter referred to in Question No. 8366, as to the employment of the three boys; the answer of Mr. M'Donald states that "one of them," that is one of Shelley's boys, "was sent out of the pit that day by Mr. Moore;" do you deny the correctness of that?—I do; it is not true.

8626. You only found two boys when you went there?—I only found two boys.

8627. Did you hear of there having been a third boy?—Not further than I stated, that some months before the man admitted having a third boy down for the purpose of keeping him company; but, as I find, I stated in my evidence only two boys were in the pit that day, and the overman denied that there was a third boy. I stated that one of the boys could read, and that the other could write. Mr. M'Donald also said in his letter to me, referring to a boy called Thomas Russell, "Thomas Russell, employed in the Hall Pit, has a son named Walter at work with him. The boy has been in the pit over 12 months; it is doubtful if he be 10 years of age. This much is certain, that he cannot read and write." Now I made the boy write his name in my book, and there is Walter Russell's name written by himself (*showing it to the Committee*).

8628. Did you inquire how long he had been there?—He had been there three or four months, the father said.

8629. Not before he was 10 years old?—Not before he was 10 years old.

8630. (To Mr. *M'Donald.*) Is that the boy you referred to?—One of the boys; the other boys were Shelley's boys; and I handed in a note last time, saying that there were three men who were willing to state on oath that they were in the pit that day.

8631. (To Mr. *Moore.*) You adhere to your previous statement?—Decidedly; I could easily get proof if necessary, but I do not think it worth while.

8632. Have you any wish for the Committee to go into any further investigation of the matter?—I believe that the manager will bring his overman.

8633. Mr. *Ayrton.*] Perhaps the boy might have been there, and you not have seen him?—I do not think so, for the men were not aware of what I wanted when I went down the pit; I went into the face, and saw those who were working.

8634. Still you know that, somehow or other, when the masters are coming amongst the men the men are like ants, and seem to communicate the information to one another in a most remarkable manner?—In that case the boy was doing no good to the master; the man himself might have kept the boy out.

8635. But it is possible that he may have been sent out without your knowing it?—It is not correct that I sent any boy out of the pit.

8636. He may have dodged you, and managed to get out without your seeing him?—I do not think so but the inference, as I read Mr. M'Donald's evidence, was that I sent a boy out of the pit in order that there might be two when I went down, which is not the case.

8637. *Chairman.*] Then there is another state- of Mr. M'Donald's which I believe you object to, concerning the case of a colliery which you reported as having got few complaints; Mr. M'Donald says, "I reported the colliery to him constantly"?—I wish to say, in answer to that, that I have received no complaints as to that colliery.

8638. No complaints ever reached you?—No complaints ever reached me. I believe that the manager of the iron works will be here, and I think the man himself. The manager seemed very much irritated that such a statement should have gone forth.

8639. It affects rather the manager than you?—It affects me only in so far as it would seem that I had sent the boy away in the first place, and then that I was not attending to complaints in the second place.

8640. Mr. *Clive.*] Do you not think that tallow would be better than oil for use generally below-ground?—I do not see any difference; it may be left to the men themselves.

8641. Does not oil foul the atmosphere?—Good ventilation obviates that.

8642. But has it a tendency to do so more than tallow?—It has.

JOHN JOB ATKINSON, Esq., called in; and Examined.

8643. *Chairman.*] How long have you been an inspector?—Ten years last November.

8644. What has been your district during that time?—The principal portion of the county of Durham; the southern portion.

8645. Have you had the same district all that time?—I have.

8646. May I ask what you were before you were inspector?—I served a six years' apprenticeship as a viewer at the Hetton Coal Company's Collieries, and I was in practice from that time (the apprenticeship ended in 1842) up to November 1855 as a viewer. I was in South Wales some time, and in the Midland Counties; and went back to the North of England previous to my appointment as inspector.

8647. As to the employment of boys, are there a great number of boys under 12 years of age employed in your district?—I could not give the proportions; but not very many.

8648. Is the number increasing or decreasing?—I think it has been decreasing since the recent Act of Parliament.

8649. Should you say that that Act of 1860 has been generally complied with in your district?—I think it has. I think there are a few exceptions, where the parents have stated their boys to be of certain ages a little before they have attained those ages.

8650. Are certificates asked for by the employers?—For the most part the boys are able to read and write before they are employed; and in a few cases the agents try, for themselves, whether they can read and write, in lieu of getting a certificate. It is not a literal compliance with the Act, but it is a compliance with the spirit of it.

8651. The Act requires that the employed should obtain a certificate, under the hand of a competent schoolmaster, that such boy is able to read and write?—Yes.

8652. I understand you to say that it is the practice of the masters to take upon themselves the judgment of that matter?—I have only met with one or two cases of the class I have spoken of.

8653. What have you done in such a case?—I have told them to discontinue it, and they have pleaded ignorance, and promised to do so.

8654. Were you satisfied with that explanation?—Yes.

8655. Do you now, upon reflection, think that you were right in being satisfied with that explanation?—I think so, where it was inadvertence.

8656. But is there any possibility of mistaking the meaning of these words, that "Before any such boy is so employed, the owner of the mine shall, after the 1st of July 1861, obtain a certificate under the hand of a competent schoolmaster that such boy is able to read and write;" do you think it is possible for an owner not to understand the meaning of those words?—The present viewer at the colliery I am alluding to is rather an illiterate man, though there is a superior man who visits it occasionally, and I have no doubt but that it was through ignorance that the thing was done.

8657. How long ago did that fact come to your knowledge?—About two years ago, perhaps.

8658. It was four or five years after the passing of the Act?—Yes; the Act has been generally complied with, as far as I know.

8659. You said that you could not speak to the actual number or proportion of the boys employed?—I could not, but I think that the number is considerably smaller than previous to the passing of that Act, inasmuch as the coalowners or managers of mines in my district do not wish to be troubled with the certificate that the Act requires, and therefore they make a point of getting only such boys between the ages of 10 and 12 as can read and write, or else they get them after the age of 12.

8660. You mean that they do that in order to avoid the trouble of the monthly certificate?—Yes.

8661. What is the average number of hours that the boys between 10 and 12 years of age are employed in that district?—Twelve hours.

8662. What is your opinion as to that?—I think it is a great pity that they should have to be so long employed, but really there is a great difficulty in my district in doing away with it; I have heard a good deal about it, and have not been able to satisfy myself of any mode of getting over it.

8663. Have you considered the possibility of employing double shifts of boys?—I have, and I think that it would so far go against the intention of the Act as to cause more accidents during the working hours.

8664. Do the boys go down at the same time with the men?—There are two shifts, as we call it, of men in my district; it is general over that part of the country.

8665. Where there are two shifts of men, what is the difficulty of there being two shifts of boys?—The men have to go and work for a couple of hours, perhaps, to get coals ready, and the boys are not wanted during that time.

8666. You mean that the time of the boys going down does not coincide with the time of the men going down?—I do.

8667. It would not coincide with the beginning of the first shift, and therefore it would not coincide with the beginning of the second shift?—Just so; and therefore there would be the difficulty of the boys being changed backwards and forwards during work time.

8668. What is the feeling among the workmen with regard to the employment of the boys?—I think that there is a considerable feeling among the workmen to have the hours shortened; but I have not met with anyone who has proposed a remedy to meet the case.

8669. Supposing that there were a meeting of the workmen where it was proposed that there should be a law forbidding them stringently to employ boys under 12, what would be the feeling of such a meeting?—A few of the workmen would object to it, I think, but the more intelligent of the workmen are anxious to shorten their hours.

8670. I am not speaking at all of the question of hours, but of the employment of boys under 12 years of age?—A few of them would complain if that were prohibited, but I think that the majority would be well satisfied, and I believe that the coalowners in my district at large, would be very well satisfied; I am told, however, that in

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in some of the thin seams, not in my district, it would work very awkwardly.

8671. I was asking specially about the feeling of the workmen, and you say that the majority, and that majority the better class, would be satisfied with a law which would forbid boys going down a pit, under 12 years of age?—That is my opinion.

8672. And is it your opinion that that would be a desirable law?—You can scarcely be supposed to confer any real benefit if you pass an Act of Parliament merely to do that which the men can do themselves without that law, and that would be the case in that instance.

8673. You do not, then, recommend that law?—I would not say that I would recommend it.

8674. You think it a bad thing that the boys should go down a pit, under 12 years of age?—Yes.

8575. But you would not make a law against it?—I would try moral means.

8676. Would it be possible to work the thin seams without boys under 12 years of age?—I believe there would be a great difficulty, but I have scarcely any thin seams in my district.

8677. Mr. *Liddell.*] Is it only in Northumberland and Durham that one shift of boys serves for two shifts of men?—So far as I know; I am not aware that it occurs in any other district.

8678. Mr. *Clive.*] You are only speaking of your own district?—I am only speaking of my own district, and North Durham, and Northumberland.

8679. Mr. *Liddell.*] Do you think that if the law prohibited boys absolutely from going down under 12 years of age, it would be popular with the parents?—Generally, I think it would; a few, I think, would feel oppressed by it.

8680. But if the generality of the parents would agree with it, we may argue from that, may we not, that the generality of the parents would not allow their children to go down below that age?—The generality do not now, I think, get them down under that age; I do not think they attempt it; I know that in my district, since the passing of the Act of 1860, they are mostly not employed till they are 12 years old, unless it be the case of a widow with children, or where they have not the means of getting their livelihood, and then the colliery agents will take them between 10 and 12 if they can read and write.

8681. Are the collieries in your district mostly well supplied with schools?—Yes, very well indeed.

8682. And there is a great disposition on the part of the pitmen to send their children to school, I believe?—A considerable disposition; I would not call it anything extraordinary; a great many of them do send their children to school.

8683. Mr. *Clive.*] Is it an increasing practice?—I think it is increasing.

8684. Mr. *Liddell.*] Are not the schools well attended?—Pretty well.

8685. At what age do you find that the boys generally leave school?—I should say mostly from 11 to 12 years of age, or something like that; some of them leave earlier.

8686. Is there much inclination on the part of the workmen to send their children into other trades than their own?—No; I think the pitmen's children generally follow their fathers' occupation; we have but little opportunity in our district for their going into other trades.

8687. Would you explain a little more clearly in what the danger would consist, of allowing the boys to be employed in two shifts?—There are a great many engines pulling coals, some of them as far as two miles, on underground railways, and going at high speeds, and there are a great many self-acting inclines; and if the pit had to be ascended and descended by two shifts there would be twice the number of boys going through these points of danger that there are at present, and they would more interfere with the work if there were a second set, or a relay of hands, than at present.

8688. If the system of two shifts of boys is adopted one of two things must happen, either a greater liability to accident, or the action of the pit must be suspended for the time?—Yes.

8689. That I suppose would involve great expense and great inconvenience, and in fact would be beyond the power of the coalowners to do?—Yes, I think almost so; I think that if it had to be done at all, that would be the way in which it would have to be done; namely, suspending operations.

8690. You mean that the action of the pit would have to be suspended?—Yes.

8691. Do the boys go down in charge of the men, or do they go down in gangs by themselves?—Generally there is one man in the cage with three or four boys; most of the men go down two hours before the boys.

8692. Boys are more disposed to be reckless and careless, I suppose, than adults?—Yes.

8693. Mr. *Greenall.*] Do you think that wages would rise if the employment of boys under 12 years of age was prohibited?—I think they would, though it is rather doubtful as to its amount; of course there would be some improvement in the prices, but I think you might bring boys belonging to other people than miners, so that the wages would probably go up only a little.

8694. Who engages the boys, the miner or the master?—The master.

8695. Mr. *Foster.*] When you spoke of the double shift of men, I think you stated that the practice was confined, in your opinion, very much to your own district, and not applicable to the whole country?—As far as my knowledge goes.

8696. Are you aware that in some of the coal districts the pits stop working, and the men are brought up in the middle of the day?—I am aware of that being the case where the men work by day's work, but not where they work by piece work, except on very rare occasions.

8697. Are you aware what the day's work really is, where the men work under the circumstances to which I have alluded?—Taking Warwickshire, where they are working on the long-wall system, the work is sub-let at so much a ton to a man who is called a Butty, and he employs workmen to hew the coal at so much per day.

8698. Are you not aware that the day's work is, in reality, though called a day's work, piece work?—I am not.

8699. You are not well acquainted, perhaps, with the mode of working the coals in Staffordshire and Shropshire?—I am not.

8700. If during a considerable part of the year the pits in a district were frequently limited to half-day work, do you think that that would be a great difficulty in the way of employing shifts of boys?—I do not quite catch the idea.

8701. I refer to the case where the pit's work

is

is altogether suspended at the end of half a day during slack trade?—One of the shifts of boys in that case would, of course, lose the day altogether.

8702. And you are of opinion that supposing there were no other difficulties in the way of employing shifts of boys, the fact of a number of boys entering the pit at mid-day, during the time that the pit is in full operation, would be attended with considerable inconvenience and danger?—I think so.

8703. You spoke of not wishing the boys to be employed the full 12 hours; to what age would you extend that remark?—I think that when a young man gets to the age of 18, he ought to be able, if necessary, to work 12 hours; but that is the very time when, in general, he gets free from doing so, because he begins to hew, and gets his hours shortened at that age. From that to the age of 20, they begin to hew, and then they scarcely work more than half the number of hours.

8704. Mr. *Liddell.*] Their hours are shortened but their labour increased?—Yes, it is more laborious work.

8705. Mr. *Foster.*] Up to what age would you wish to limit the labour of boys, and to provide that they should be employed less than 12 hours?—I think up to 18. I think that at 18 a young man ought to be capable of exercising discretion of his own.

8706. Have you observed boys suffer from fatigue after 12 hours' work?—I have not had the opportunity of observing it. I do not think that the boys' work is very fatiguing except that the hours are so long. I do not think that the work of boys in general, in my district, is anything hard; the work, in fact, is comparatively easy, but the hours are too long.

8707. Mr. *Liddell.*] Does it appear to tell upon their growth?—A plant grown out of the sunlight is never so healthy looking as one grown in the sunlight, and they are a little paler than other boys, owing to their being excluded from daylight.

8708. But does the amount of work put upon them interfere with their physical development and growth?—Not now. I think it used to do so formerly, when they were engaged in pushing the tubs along, but now that work is done by ponies.

8709. Mr. *Foster.*] Would you wish Parliament, after consideration of the subject, to impose any further restrictions with reference to the employment of boys than are already imposed on that subject?—Personally I should not, because I think that parents are now at liberty to interfere in the matter.

8710. Mr. *Clive.*] You have said that the disposition of the parents for the education of their children is increasing?—I think it is.

8711. Have you heard complaints among the workmen of the education clause, as I may call it, in the Act of 1860?—I have heard of complaints having been made to the viewer. I have heard of parents taking children to the viewer to get them employed, and when they have been refused owing to a want of age or of education they have grumbled, though not to me.

8712. *Chairman.*] Have you any further restrictions to suggest upon the employment of women than those which now exist?—Fortunately we do not employ any in my district, so that the question would only be an outside one so far as I am concerned.

8713. As to ventilation, are you satisfied with the general state of the ventilation of the collieries in your district?—Generally speaking the ventilation is good; of course there are exceptions.

8714. Have you often had complaints of defective ventilation?—I get probably, upon an average, half a dozen complaints during the course of the year.

8715. Do you suppose that there is any fear amongst the workmen that prevents them from sending more complaints?—When they do send complaints they are sometimes a little afraid, so they tell me; but I cannot say that I remember a single case where anyone has taken harm from doing it.

8716. Do the masters always know who sends the complaint?—No, they do not; but they often get to know, and sometimes the workmen blame the inspector, though it may be no fault of his.

8717. It is not your practice to tell the master who has sent you the complaint?—No; but the masters frequently tell me who sent for me. Very often there has been a little quarrel with the overman or the workmen, or there has been a meeting of workmen, and one has gone and betrayed the other.

8718. You do not consider it, do you, to be part of your duty to visit a mine without complaints?—I do occasionally, though of course it is very little that can be done that way with the present number of inspectors.

8719. Have you generally found the complaint that you receive, well founded?—I should think, making a guess, that for three out of four there is some foundation.

8720. In consequence of the complaints, have you had to enforce the penalties in any case?—No, I think I have always got the matter arranged and got it put right as quickly as possible; I do not recollect ever having to take proceedings.

8721. When you say "the matter arranged," that is to say the defect corrected?—Yes.

8722. What is the nature of the defects in ventilation that you have chiefly noticed?—Most of them have been from accumulation of carbonic acid gas, making the lamps burn dimly.

8723. Black damp?—Yes.

8724. That is the evil itself, but what are the causes of defective ventilation; is it from want of airways that the accidents occur?—The complaints mostly occur in what is called the Coxhoe district; they have got a very bad and very friable roof, and the airways are very difficult to keep open; carbonic acid gas, though injurious to health, when in a moderate quantity is not fatal, but the falls of roof and the difficulty of keeping the airways open are the general causes of defective ventilation.

8725. Is the ventilating power sufficient generally?—Generally, provided the airways are sufficient.

8726. Has your attention been directed to the operation of the second general rule?—Yes, it has.

8727. Are you satisfied with that rule?—Yes, I am satisfied with it.

8728. Do you know that we have had strong evidence to show that it is desirable that, instead of fencing these places where the work is suspended, the current of air should be carried round or into them?—Yes; but if that rule were done away

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away with in the form in which it stands, and if they were obliged, in order to do away with the accumulation, to suspend the working of the pit, it would occur in some pits two or three times a week perhaps, through a little fall of stone causing an accumulation of gas in one place. That stone would have to be removed, and it might take two or three hours in some cases, and it might not be discovered in time to allow it to be done; and hence the whole of the workmen would lose a day's work.

8729. Your objection to the alteration of that rule merely arises from the particular nature of the roof in your district, does it not?—I think that the objection would apply generally; the very bad roof I have named is confined to one part of my district.

8730. I understood you to say, that the soil was of a peculiarly friable nature in your district?—That occurs in the cases where I was speaking of an accumulation of choke-damp, in reference to which I have had complaints.

8731. Then that friability of the roofs does not exist throughout your district?—No.

8732. From your experience and observation then, are you satisfied with the second general rule?—I am.

8733. Is it on the ground of expense that you do not recommend any alteration of it, or do not you think that the safety of the mine would be increased by carrying the air round these workings or suspended workings?—In many cases where there is a small accumulation of gas in one place or two places, the safety of the mine can be provided for much quicker by fencing than by removing, and I think it would cause a great inconvenience to the workmen of the collieries, and be a great loss to the owners, to have to suspend the working of the pit simply in consequence of a local and small accumulation.

8734. But why is it necessary to suspend the working of the pit; if they merely carry a current of air down the suspended working, how does that suspend the general working of the pit?—A fall of stone, discovered near the hour for commencing work, might require hours for its removal; and until this was done the place could not be ventilated.

8735. Ventilating is carrying the air down to the bottom and back again; that is what I understand it to be?—Certainly it is.

8736. The air will dilute the gas, and bring it out together with itself, will it not?—Quite so; but in many cases it would take some time to do that, and the whole of the working would have to be laid off till that could be done, if the rule were altered as suggested.

8737. You think that in a suspended working there might be such an accumulation of gas that it could not be safely removed while the workmen were working in the pit?—No; but if I understood the original question put to me with reference to the second rule, I took it to be whether it would not be better to render it imperative that any accumulation of gas should be removed previous to the working of the pit.

8738. My question is not directed to that; the fact being that the manager or owner is now at liberty to omit from his ventilation any working in which work is not actually going on; though he is bound to fence it off, we have had much evidence to show that it would be better if he had still to treat that as a part of the mine which he was bound to ventilate; I am not talking of absolutely abandoned workings, but of workings suspended for a time?—So far, the fewer the accumulations of gas that are allowed to remain the safer the mine, no doubt.

8739. But taking into consideration the *pros* and *cons* of the case, are you satisfied with the second rule?—Yes.

8740. Although you admit that it would increase the safety of the mine if, instead of fencing, they were bound to ventilate?—Yes.

8741. Mr. *Liddell.*] Have you experienced any difficulty in carrying out the general rule No 1, in consequence of those words, "under ordinary circumstances," occurring in the rule?—I have known objections raised on those words. When I have found fault it has been urged that it was under extraordinary circumstances; but really I do not see that that could be very well altered, because there are extraordinary circumstances, and there will be extraordinary circumstances, where I think it would be unreasonable to make it penal to avoid them, because I think it would be impossible to avoid them in all cases.

8742. Then you do not think that the omission of those words is required in fact?—I do not think that it is feasible.

8743. Sir *Philip Egerton.*] On referring to your report of 1864, I see that you had several complaints as to bad ventilation, and that upon investigation you found them to be well founded?—Yes.

8744. I want to know whether since 1864 you have found these complaints diminishing in number in consequence of the steps which you took at that time?—Without referring to papers, I am afraid that I can scarcely say whether they have increased or diminished in number.

8745. But, in fact, do you find that the ventilation has improved since 1864?—In those particular places it has, no doubt.

8746. I see that you mention one place where you found that the working was 40 yards ahead of the air, and without any brattice in it?—Yes, that was only one particular place in Cassop.

8747. In consequence of the instructions which you gave in that case, do you find the bratticing better attended to now than it was then?—Yes, much better.

8748. Who are responsible for the bratticing in your district?—The deputy overmen.

8749. They are appointed by the owners?—Yes, they are appointed by the owners.

8750. And the responsibility of carrying on the brattice devolves on them?—Yes, it devolves on the deputy overmen; and the overman and the viewer ought from time to time to see that they do their duty in that respect.

8751. Is the timber also found by the owner?—Yes.

8752. Is there a fireman also appointed for the mines in your district?—These deputies are the firemen; they are tantamount to them.

8753. The fireman examines the state of the workings before the workmen go into them?—Yes.

8754. Altogether you think, as I gather from you, that bratticing is better attended to than it was in 1864?—Yes, in that particular colliery; there was a prosecution on the part of the men to recover a fortnight's wages in that same colliery, and I think they ultimately recovered; costing the owner probably as much as 200 *l.*

8755. You state that the ventilation in the Cassop pit has improved since August 1864, and that

that improvement has been carried on, as I understand you, up to the present time?—Up to a very recent time, except on one occasion in that pit; not very long ago I was down there.

8756. *Chairman.*] In that case in which you said the working was 40 yards ahead of the ventilation, what step did you take?—It was not a case in which the owner was liable to be prosecuted; there was no gas in the place at that time, as far as I recollect; I have not a precise recollection of the facts, but I think there was no black damp in it, notwithstanding the absence of the brattice, although there was black damp in other parts of the workings; one inconvenience arising from the want of the brattice is that when the workmen blast with gunpowder, the smoke lingers a long time; that is of course more or less injurious.

8757. You do not conceive, taking into consideration the circumstance of the case, that that was a violation of the first general rule?—No, not in that particular working place; I could not so speak as to every place in the pit.

8758. Mr. *Liddell.*] Are these deputy overmen a superior class of men?—They are; they are chosen from the ordinary workmen on account of their superior intelligence and education.

8759. And, I presume, on account of their experience of the pit?—Yes.

8760. Are the workmen, for the most part, as far as you are aware, satisfied with the appointments of overmen?—I think they are; I never hear any complaints from the workmen on that head.

8761. Sir *Philip Egerton.*] In this Cassop colliery, is the ventilation by furnace power sufficient?—Yes, it is, generally.

8762. But I see you state here, "I believe that one of the chief causes of this slack ventilation, at the time of my examination to-day, was the air descending the downcast shaft being nearly as warm and nearly as light as the air ascending the upcast shaft"?—Yes, but they were then making preparations to connect that pit with another pit belonging to the same company half a mile off, and while the grass was growing the horse was starving; they had not got it accomplished at that time, but it has been done since.

8763. One of your recommendations was, that a ventilating machine should be put up at the Vale pit; what description of machine were you thinking of, a suction-pump or a force-pump?—I probably had in my mind M. Guibal's fan; I do not know that I mentioned it.

8764. It was as an auxiliary apparatus?—No.

8765. Was it for the ventilation of the whole mine, or only for a portion of the mine?—For the whole of that pit.

8766. *Chairman.*] As to the general rules, have you any suggestions to offer about them, or are you satisfied with their observance generally in your district?—Yes, I think they are very well observed.

8767. And you have no suggestions to offer in respect to any of them?—None.

8768. Mr. *Liddell.*] How is this M. Guibal's fan worked?—It is a centrifugal fan, exhausting air into a central opening, and throwing it out into a chimney, *evaseé*, or widening, upwards.

8769. Is it worked by steam power?—Yes.

8770. Is it extensively used in our collieries in the north?—There are three, I think, in Northumberland and Durham, which have all been introduced within about two years, when the first was introduced, and a fourth is about to be erected.

8771. Then it is gaining ground?—It is gaining ground.

8772. You consider it to be the best mechanical mode of ventilating mines?—Yes, as good as any I know.

8773. *Chairman.*] Have you had a large number of accidents in your district?—In proportion to the coal worked, I think that the number of separate fatal accidents in my district is less than in any other except Scotland, unless I except Yorkshire also; I have with me rather a lengthy statement of accidents for the last 10 years in each district in the kingdom (*producing the same, and showing it to the Committee*).

8774. Is that a statement that you have drawn out?—Yes; it is not quite complete.

8775. Is it one which you are making of your own accord?—Yes.

8776. If you will take it back with you and complete it, we shall be much obliged to you?—I will do so.

8777. Mr. *Greenall.*] Does that statement show the per-centage of accidents?—It will do so when it is complete. Perhaps I may be allowed to read from it one remark bearing upon this inquiry: "During the two years 1856 and 1857 there were 2,144 deaths from colliery accidents, and the coals raised during these two years amounted to 146,399,493 tons; whereas eight years later, in the years 1864 and 1865, 194,034,088 tons of coal were raised, so that if the deaths had increased in the same proportion as the increase in quantity of coals raised there would have been 2841·6 deaths in the two years 1864 and 1865; whereas there were only 1,851 deaths in these two years, being 990·6 fewer deaths in proportion to coals raised—a reduced fatality to the extent of nearly 35 per cent. in eight years, when considered in relation to the coals raised."

8778. *Chairman.*] I will take you through the most important of the accidents mentioned in your report; I see that your accidents from explosion of fire-damp are very few?—They are very few in my district.

8779. Excepting one particular occasion, in the year 1860, when you had a great accident?—That was scarcely an explosion of fire-damp; it was supposed to have arisen from the gases generated by an underground boiler fire in a flue passing from it.

8780. One of the most frequent causes of death in your district, I gather from your report, is falls of coal and stone?—Yes.

8781. And they do not seem to diminish in number, for I see that there were 30 in 1860, and there were 30 in 1864?—But the quantity of coals worked had increased during that time; it would be very difficult indeed to make any great reduction in those deaths.

8782. What is the cause of the frequency of the accidents in your district?—I do not think that they are more frequent in my district than in the general run of the coal districts.

8783. Without making any comparison between your own district and other districts, will you state in what way it is that these deaths by falls of stone or roofs occur?—There are frequently natural divisions in the stone which are difficult to detect, and if the timber does not happen to be placed under those divisions, the roof falls unexpectedly. In other cases the workmen themselves

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venture under the stone before it is properly timbered.

8784. Do not those accidents arise practically in your district from the removing of the timber?—Yes, they do, so far as regards the deputy overmen.

8785. Is it the practice in your district to remove the timber?—Yes, so far as it can be done with sufficient safety.

8786. Do they not leave the timber even till it rots, in some districts?—They remove it in our district.

8787. That is a work attended with great danger, is it not?—Yes.

8788. The deaths that I see mentioned here of overmen are attributed to that cause; that work is done by overmen, is it not?—By deputy overmen, in a very great measure indeed.

8789. But you do not think that that fact renders it necessary to leave the timber instead of removing it?—I think that if the deputy overmen would take more care they might often obviate those accidents.

8790. Sir *Philip Egerton.*] On whom does the responsibility of putting up the props rest; is it done by the workmen or by the master?—By the deputy overmen altogether.

8791. At the expense of the coalowner?—Quite so.

8792. Mr. *Liddell.*] Do you find that, inasmuch as this dangerous task is confided exclusively to them, the proportion of deaths among the deputy overmen exceeds that of any other class of workmen in the pit?—Yes, it does considerably.

8793. How does this affect the inclination of the workmen who undertake this duty to fill the post; are they tempted by higher wages to do so?—Their wages are not so high as are the wages of the men generally when they are coal-hewing, I think. They feel honoured by the office, and that, I think, as much as anything, actuates them to take it.

8794. Honour and danger go together sometimes then, it seems?—Yes.

8795. Mr. *Fawcett.*] Is the work laborious?—The work is not so laborious as coal-hewing, but it is not easy work when it is properly carried out, and the hours are rather longer.

8796. Mr. *Greenall.*] I suppose that they have no difficulty in getting a proper supply of timber?—There is almost universally a sufficient supply of timber. It is a very accidental and rare case for me ever to learn that there has been any want of timber.

8797. Mr. *Clive.*] That statement which you were alluding to just now shows a great diminution in the number of accidents during 10 years, in proportion to the coal worked?—Quite so.

8798. During that time have not the mines in Northumberland and Durham been extending in depth?—There have been a few of them extending in depth.

8799. Still, none of them are shallower, I presume?—Yes, some shallower ones have been sunk within the time. I do not think that there is much difference in that respect.

8800. Are they fiery mines generally?—In the eastern part of the county they are so; in the western part of it, not so.

8801. Do you think that those accidents have decreased more rapidly since the passing of the Act of 1862 than they did before that time?—I cannot say that I have observed that. The table which I am preparing would show that, if I had time to do it.

8802. You mentioned a period of 10 years; of those about five would be after the passing of the Act and five before it?—Yes, nearly so.

8803. Do you think that you could add a column to that statement to show that?—Yes, I think so.

8804. The Shaft Act was passed in 1862?—Yes.

8805. Has that been generally complied with?—It has been complied with in all cases; that is to say, the literal requirements of the Act have been complied with in all cases, but there are two cases in which the time, as extended by arbitration, has not yet expired, and where the shafts are not completed.

8806. Sir *Philip Egerton.*] Can you say whether the accidents from falls of stone and coal have increased since your report for 1864?—I could not say. In so short a time as the interval from 1864 to 1865, you could not give any statistical information.

8807. I observe that you give in your report some useful cautions to workmen on that subject; have those cautions been acted upon at all?—I think they have; I think that last year (1865) there was a diminution in the fatality, particularly amongst the deputy overmen.

8808. I gather from your report that, if ordinary care were taken by these men, the number of accidents would be very much diminished?—No doubt of it; I think there is a great deal of venturesomeness on their part, which causes many of the accidents.

8809. Mr. *Liddell.*] The seams in the county of Durham trend from the west to the east, do they not?—They dip in that direction.

8810. And consequently the pits in the eastern district are for the most part deeper than those in the western district?—Yes.

8811. And that will account for the prevalence of fire-damps in the eastern district, and choke-damps in the western district, will it not?—I do not know that, because in some cases you will find less gas in the very depths of the earth than you find in the shallower mines.

8812. As a general rule, is not choke-damp more prevalent in the shallow pits than it is in the deep pits?—It will vary, but as a general rule it is so.

8813. Mr. *Fawcett.*] What is the number of deputy over-men employed in your district?—I cannot say.

8814. Can you say what comparative proportion they bear to the number of hewers?—One-twelfth, I think, or something like it.

8815. Could you give us any approximation to the number of deputy over-men?—I could not do so off-hand.

8816. Mr. *Greenall.*] You said, I think, that these over-men often run unnecessary risks?—I think so in this respect, that in order to save themselves trouble they neglect in some instances to prop their way out as we term it; that is to say, to put in extra props, so as to keep the roof up where they are standing. Sometimes that is necessary, and I am afraid that is frequently neglected by them.

8817. And when neglected, that neglect brings a penalty upon their own heads?—Yes, unfortunately, it does.

8818. *Chairman.*] The next head of accidents mentioned in your report, to which I will direct your

your attention, is that of accidents from inclines and engine planes, and by trams or tubs underground; it appears that those are a very frequent source of accident; I will first ask you, in reference to those accidents, whether they arise in any way from the neglect of the rule which requires the making of places of refuge?—No, it scarcely ever happens that such a case occurs; in fact, I do not know that any one has arisen from that cause.

8819. Is that rule, then, generally complied with?—Yes.

8820. And these accidents do not arise from a want of compliance with that rule?—No. I think that sometimes those accidents arise from people being deaf; sometimes from their being too venturesome, and trying to get, as far as possible, before the train overtakes them, instead of going into a refuge.

8821. Are there refuges provided, as required by the Act?—Yes, within 20 yards of each other.

8822. Do you mean that that has been a matter of observation with you?—Yes.

8823. Therefore, the men have been caught between one place of refuge and another in a distance of 20 yards?—Yes; sometimes they do not think it worth while to go into a refuge, and if the tubs happen to pass them, an accident may occur.

8824. What are those accidents chiefly which are caused by trams or tubs underground?—That generally applies to young boys who are employed to drive ponies to the place where the engines draw the tubs. The galleries are very low, and the boys are of such an age as not to be sufficiently discreet at all times; and they get caught at times between the head of the tub and the roof. Sometimes the pony becomes restive, and the boys fall in before the tub; and in various ways of that kind those accidents occur.

8825. What is the age of the boys who drive these ponies?—From 12 to 15, I should think.

8826. You think that they are not employed under 12 at this work?—There is no law, and no rigid practice with regard to that; but I say from 12 to 15, speaking from what I have observed. I think that there are scarcely any under 12 who are employed at that work.

8827. Do you think that they should ever be employed under 12 at that work?—It would depend upon circumstances. If a boy had been two years, or a year and a half in the pit, and if he were a very intelligent boy, he might be just as fit for the work as another boy who was 13 years old. I think that a boy from 10½ to 12, if he was a bright intelligent boy, might be just as safely trusted as an older boy who was not so.

8828. But if you say from 10½ to 12, then he could not have been in the pit two years?—No; I should say a year and a half.

8829. You would not suggest a regulation, that no boys under 12 should be so employed?—I think not. I think that the difference in intelligence and the difference in bodily activity in boys is so great that it would be difficult to meet the case by one general law.

8830. According to your reports these accidents appear to have been rather upon the increase, because I observe that those which occurred by trams or tubs underground were 10 in number in 1860, and 16 in 1864; and I observe that in every case the number of deaths corresponds with the number of accidents; that is to say, there was only one death at a time?—Yes.

8831. Mr. *Liddell.*] Are the thin seams in the county of Durham exclusively worked in connection with the thick seams?—No: there is a seam of coal from about three feet thick to two feet thick; that is what is called the low man coal seam, but there are very few thin seams worked in the county.

8832. There are a considerable number of thin seams, I believe?—Yes, but many of them, I am afraid, are very thin.

8833. Mr. *Greenall.*] You said that the boys were engaged by the masters. Who pays the boys their wages?—They are paid at the office by the agent.

8834. The miner has no profit upon the labour of the boys?—No. Of course when the boys are so young as to be under their fathers' roof, it will go into the general fund of the household.

8835. *Chairman.*] One cause of accident about which I have omitted to ask you is described as "falling from part way down?"—That is a distinction made in one of the columns of the table. Some fall from the top of a shaft and others fall from cradles or from scaffolds.

8836. You are aware, perhaps, that it has been suggested by workmen that where a horizontal gallery comes into the shaft it should be fenced off?—Do I rightly understand that to be while coals are being drawn from it?

8837. Yes?—It is a very difficult matter to do, where work is throng, if the cage has to go below the mouthing.

8838. It has been suggested that a movable fence should be laid down?—If it is at the bottom of the shaft, of course, the fence is not suggested, but it is only when it is so far above the lowest part of the shaft; in that case, if the cage has to descend to the lowest part, this fence is very apt to be in the way of the cage when it is descending.

8839. Then, speaking from your own judgment, you do not see how greater precaution can well be used in that respect?—I think that the case might be met by a very complicated apparatus, perhaps; but it will be rather a difficult thing to do in any way. If the cage has not to descend below the mouthing, then a trellised platform can be fixed in the shaft, a little below the mouthing, so as to allow ventilation to pass for the lower workings, and prevent persons or things falling to the bottom of the shaft, and this might be made one of the General Rules.

8840. When there is such a gallery opening into the shaft the men may go too far with the trucks and be carried on by the trucks, and then they fall into the pit; that is how the accidents happen, I presume?—On some occasions that is so.

8841. And if there were something to stop them at the entrance of the mouthing, such an accident as that would not happen?—Just so; and as far as it is possible to do it, in the present state of colliery practice, I get it done in the pits in my district.

8842. I see from your report that you had rather an increase in the number of those accidents; whereas in 1860 the number was only two, in 1864 it was five?—That was very probably occasioned by the sinking of pits in compliance with the Act of 1862 causing an extra number of shaft accidents.

8843. But I am alluding now to the particular accidents of "falling from part way down"?—I

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have not looked at that report for a long time, and I cannot, off hand, give the cause of those accidents.

8844. As I understand, you have no suggestion to make in the way of any alteration in the rules or in the way of fresh rules on that matter?—No.

8845. Sir *Philip Egerton.*] I see that there are six accidents "whilst ascending or descending," in 1863?—Yes.

8846. In your district is the ninth general rule complied with which requires that a sufficient cover over head shall be used when lowering persons?—Yes, almost universally; they have in some cases one cage upon which they do not put a cover, for sending long timber down, but it is all but universally the case that the cages are covered in my district.

8847. Then I see that you have mentioned in your report some other accidents that took place in consequence of men being lowered in a cradle, suspended by two distinct ropes?—Yes.

8848. And you are of opinion, as I gather from the report, that a cradle ought not to be employed for the purpose of lowering men?—No; a cradle ought to be lowered from the surface, or through any considerable depth, with not more than one workman, or two at the most upon it, to guide it.

8849. I see that one of your recommendations has reference to the seventh general rule; you recommend that different classes of signalling apparatus, such as the rapper and a bell, should be used; is that rule about signals complied with in your district?—The rule is generally complied with; as I understand it to mean, it is universally so; I did meet with one case of neglect some time ago, and that was at once remedied; but, otherwise, it is carried out universally.

8850. What led you to make this special suggestion in your report?—An accident arose there; the bell and the rapper, which I recommend, are in use in some places; but there had been a special accident, no doubt, that called forth that remark. It was made with a view to the greatest safety of the pit, there being a mouthing above the bottom of the shaft.

8851. Could not you have proceeded under the Act for a breach of the general rule in that case?—No, the Act was complied with. That is a suggestion beyond the requirements of the Act. The Act does not require that there shall be a bell; it requires that there be a means of sending signals both ways, that is to say, from the top to the bottom, or from the bottom to the top; it does not require both a bell and a rapper.

8852. The words of the Act are "distinct and definite signals?"—Yes, that means that it is not merely to be a noise, but that there are to be separate signals for separate purposes. You may give one knock, for instance, for one signal, two knocks for another, three for another; that is the meaning of those words. I take those words to imply, (indeed I believe they were my own words, having been suggested by me previous to the passing of the Act) that it is not to be a signal unvaried, but it is to be a variable signal so as to convey different ideas.

8853. According to your own explanation, there should be different classes of signalling apparatus?—Yes, I think that in some cases it would be very desirable.

8854. You would have a code of signals, in fact?—Yes, there is a code, even where there is only one class, but if you have two separate apparatuses, it doubles your facility for giving signals.

8855. You would have one signal to show when coals were coming up, and another when miners were coming up?—Yes.

8856. *Chairman.*) They do use signals on the inclined planes, do they not?—Yes.

8857. Sir *Philip Egerton.*] With reference to accidents from machinery, are you in the habit of employing either the safety catch, or the disconnecting hooks?—Very little in my district, there are very few of them in use.

8858. You are aware of the safety catch to which I allude for preventing cages from falling if the rope breaks?—There are very few, indeed, in my district.

8859. But we have had evidence from other districts that those safety catches have been attended with good results?—I would rather trust myself without them than with them, for my own part; I believe they are liable to give rise to accident from getting out of order.

8860. *Chairman.*] The Committee have had this letter forwarded to them from the Home Office, to which it was sent by certain miners: "Thornley, April 3rd, 1866. To the Honourable Committee on Mines Inspection Act.—We desire to lay before your most Honourable Members a few facts connected with our coroners' inquests; the first is a case that occurred at Thornley Colliery, on the 23d August last, from an explosion of gas, whereby three persons were launched into eternity; the jury that assembled returned a verdict of accidental death, which, I believe, was quite contrary to evidence, which we can produce already. But we beg to refer your most honourable Committee to the Home Office, where we hope they will have arrived by this time. The next case is one which occurred at Trimdon Colliery, touching the death of one George Cook, which took place about June 1865. This is the opinion of this poor man's friends on this case: I have not seen the evidence myself; I cannot give my opinion." You have made special reports upon those two cases, have you not?—Yes, that letter was referred to me from the Home Office, and I sent extracts from the report which is pending publication at present.

8861. What is the nature of your report?—As regards the Trimdon accident, I think it was an accident that was very unlikely indeed to have been foreseen or prevented; it was one which was of a very unusual nature indeed, and I quite myself endorse the verdict given by the jury, in so far as my opinion goes.

8862. Will you describe the nature of the accident?—So far as I could ascertain, there was no one there to see it; there was no one in the pit who saw any explosion except the unfortunate man who lost his life, but from the appearance of the place I came to the conclusion that gas had become dislodged from above some old timber by the falling of stone, and which had just puffed the gas upon his naked lamp.

8863. But that is not a fire-damp accident?—It was a fire-damp accident; yet it took place in the intake current of air.

8864. It did not arise from the absence of propping?—No, not from a want of ordinary propping.

8865. Mr. *Greenall.*] Were you present at the inquest?—Yes; I gave evidence upon the case myself.

8866. Mr. *Fawcett.*] Were there any working miners

miners on the jury in that case?—I cannot say whether there were or not, but I think they were mostly shopkeepers, butchers, and such like, and that some of them had been miners previously.

8867. Mr. *Foster.*] You were perfectly satisfied with the verdict of the jury in the Trimdon case?—Yes.

8868. *Chairman.*] What was the nature of the other accident?—The other accident took place in the Thornley Colliery where, in the lowest seam, which had been abandoned for some years, the water had been allowed to accumulate in the deep workings, and after it had accumulated to very near the shaft bottom, some gas had made its escape; I thought, and stated so at the inquest, that it would have been more creditable and much safer management had there been a more continuous or more frequent and careful examination made of this lower seam, where the water was rising, than I could ascertain had been made.

8869. Then it was your opinion that that accident arose in some degree from neglect?—It did, I think, more or less so, but I certainly did not think that it was such neglect as to be such culpable neglect, as to warrant a jury in finding a verdict of manslaughter, though I left that for the jury to decide for themselves.

8870. Was it such a violation of any of the rules as would have justified proceedings for a penalty?—I think it was no violation of any rule.

8871. Have any steps been taken to remedy it since?—Yes.

8872. As to the character of the witnesses that were examined upon the Trimdon colliery case, I observe that the first witness is a viewer, the next witness a workman, the next an overman, the next a back overman, the next a deputy, the next a back overman, the next a resident viewer, the next two deputies, the next two miners, the next a hewer, and the next a miner?—Yes, possibly go.

8873. Do you consider that the witnesses were properly selected?—Yes, I think it was a very fair selection, but I had nothing to do with it.

8874. You were present there, and can tell us whether the workmen who were likely to be acquainted with the circumstances, appeared to you to have been summoned?—Yes, I think so.

8875. Who has the summoning of the witnesses?—The police officer, I believe.

8876. And how does the police officer satisfy himself as to the witnesses to be summoned?—I suppose that he goes round the village and speaks to anybody likely to give information.

8877. Amongst the managers and amongst the workmen?—I think amongst the workmen, and amongst the colliery agents.

8878. Do you think that he goes mostly among the colliery agents, or the workmen?—I cannot say.

8879. Do you think that a policeman, if he addressed himself to a colliery manager, would be likely to obtain proper information on the subject?—In most cases he would if there was no blame, for then there would be no cause for concealment, but I frequently call for witnesses who have been overlooked or omitted by the policeman.

8880. You have expressed your wish on those occasions?—Yes, so far as to say that I should like to have such a one called.

8881. Have you never thought it part of your duty to represent to the superintendent of police that you thought the policeman had neglected his duties in the summoning of witnesses?—No, I have not seen occasion to do so; I have not supposed it to be wilful.

8882. In those cases in which the policeman had neglected, in your opinion, to call the proper witnesses, from whom did he happen to take his information?—I cannot recall the suggestions I have made as to calling other witnesses; I may have complained two or three dozens of times.

8883. Have you not inquired as to the causes of the omission?—No.

8884. Mr. *Liddell.*] Is it not competent for any workman who may feel interested in an accident, to proffer evidence?—Quite so.

8885. And in the event of his so doing, I presume his evidence would be accepted?—So I take it from the proclamation of a coroner's court, which says that whoever wishes to give evidence must come forth, and shall be heard.

8886. And that proclamation is thoroughly understood by the workmen, I suppose?—That I cannot say; if they are present I should think they cannot fail to understand it, it is so simple; but those who have not been at an inquest at all would be likely to be ignorant of it.

8887. But as a general rule, do the men whom you are acquainted with know that they are at liberty to offer their evidence?—I think, as a general rule, they do; I think they would go to the policeman about it, and the policeman would give them the information, if they felt aggrieved or interested.

8888. Mr. *Greenall.*] In all such inquests as you have attended, have you been satisfied that sufficient witnesses have been called for the justice of the case?—I do not recollect a case in which I felt any dissatisfaction after getting certain witnesses called; I have called them now and then, when I have thought there had been omissions.

8889. *Chairman.*] As to the composition of the jury, do you remember what was the composition in that Trimdon case?—Judging by their appearance and their conversation, almost all the juries in my district seem to be composed of small tradesmen; occasionally there are one or two workmen.

8890. But habitually the great majority are composed of the small tradesmen?—Yes; but those small tradesmen have been, in a good many instances, employed in mines previously to becoming tradesmen.

8891. Are you present with the jury when the jury are deliberating upon the verdict?—Not in all cases; if the case is simple, and they come to a conclusion at once, we do not leave the room, but whenever they seem to express doubt the room is cleared, and they are left to deliberate by themselves.

8892. Without your presence?—Without my presence and without the coroner's presence.

8893. You occasionally hear the observations they make, and in that way you can form an opinion, perhaps, of their intelligence?—You can glean something from the questions they put to the witnesses.

8894. Judging from that should you say that, upon the whole, they seem competent to form a judgment upon the questions submitted to them?—Generally I think they are. Of course they are not the most intelligent of men, but I think that in general they come to proper conclusions.

8895. Then you are generally satisfied with the competency of the jury?—In general I am.

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8896. Are you satisfied with their fairness?—Yes, I think they are generally fair.

8897. Do you think that they would improve either in knowledge or in fairness if a certain number of workmen were added to them, or made part of them?—I do not think that they would be improved, either in intelligence or in fair dealing, by such an addition. I think that if a prejudice could be supposed to be imported into a case it would be by appointing working colliers as jurors.

8898. Do workmen never act as jurors in your district?—Yes, upon a chance occasion.

8899. Have you found any difficulty in the jury arriving at a fair conclusion when that has been the case?—No; but workmen have generally been in a minority, and I do not know that, in those particular cases, they had any ill feeling in the matter; but it might be that the master and the workmen were at variance on the question of wages, and many other things of that kind, and they frequently create a little feeling.

8900. You say that where there have been workmen on the jury they have generally been in the minority; do you mean in the minority in regard to the verdict?—No; because that has to be unanimous. I mean a minority in the number of jurors.

8901. You do not recommend, as I gather from you, that Parliament should accede to the suggestion of making it necessary to have a certain number of workmen on the jury?—I think it would only be fair that there should be some coal owners or agents imported as well, if that rule were made.

8902. Mr. *Fawcett.*] Does much dissatisfaction exist in your district amongst the men with reference to the constitution of these juries?—Not much in my opinion, so far as I can glean, and so far as I know; occasionally there is a little dissatisfaction expressed; the very case which has been brought before the notice of the Committee is an instance of it, but that is only a letter from one man, and I am not aware that the workmen of Trimdon generally have any feeling upon that case.

8903. Have you ever known a jury, the great majority of which had no practical knowledge of mining?—Yes; I should think there have been occasionally juries so constituted in my experience.

8904. And they would necessarily be incompetent juries, would they not?—In such cases I make a point of doing all I can to bring the case as clearly before them as possible, and perhaps I take a little more trouble than I should do if I thought them better able to comprehend it.

8905. Would you suggest any legislation to secure that the majority of the jury should always have some practical knowledge of the subject, whether they were working miners or not?—I think it would be scarcely desirable to lay down that rule, and I think that it would be rather difficult to manage without getting actual workmen employed.

8906. Mr. *Liddell.*] Have you an unlimited power of cross-examination upon these inquests?—The coroner has the right to decide what is a reasonable question and an admissible question, but I have never known that right so exercised by him that he has ruled that a question was unfair which I had wished to ask.

8907. Have you always found that you could elicit any information that you thought desirable?—Yes.

8908. You said, I think, just now, that if workmen, as a rule, were admitted on the jury in any particular proportion, it would be fair that an equal number of coal owners or agents should also be admitted on the jury?—I think that a jury could scarcely be considered to be fairly constituted without that, if the workmen were admitted as a rule.

8909. Supposing it to be a question likely to be the subject of much difference of opinion, would not that lead to unseemly disputes between the jurymen possibly?—In a chance case it might. In the majority of cases I think that the opinion is so unanimous, that there would be no difficulty; but in a chance case, there might be a difficulty, and there might be some feeling imported into the cases occasionally.

8910. I will illustrate the question which I am about to ask you by that terrible catastrophe which happened at the Hartley Colliery; when an accident occurs of that frightful nature, and a vast amount of public sympathy is created, and very strong public opinion brought to bear upon it, is there any peculiar pains taken in the selection of the jury under those circumstances?—I do not think there is. I believe that the general way is, for the policeman to use unlimited discretion. I cannot say what was the practice which was followed in that Hartley case. There might have been extra care taken, but I am not aware of it, and I do not know that ever to happen in my district. I think it is altogether left to the discretion of the policeman.

8911. Do you think it is desirable that a selection should be left entirely to the discretion of the policeman?—I have sometimes thought that it did not seem desirable that a man of the stamp of a policeman should be able to select what persons he thought fit.

8912. Policemen are not always very discreet men?—They are not.

8913. And it might happen, might it not, that a policeman was a strong partisan?—Yes, it might; I may add, however, that I think that in the Hartley case, and in all cases of that class, the superintendent of police would go himself, and not allow his subordinate to exercise unlimited discretion in the matter. I think, when I come to recollect it, that is what is done in such cases.

8914. Would you like, as an inspector, to have the power placed in your hands of objecting to any particular juryman or jurymen, in particular cases?—I do not like responsibility, but of course I could not object to it if it were wished that I should assume it; I would rather be free from it.

8915. Do you think that objection would be taken on the part of the masters to giving you that power?—I should scarcely think there would, but I am not prepared to say yes or no to that question.

8916. You said that in some cases the superintendent of police did not leave the duty to his subordinates?—In general, I think, he does, but where there is a heavy case he does not leave it to them.

8917. But I understand you distinctly to say that your are not favourable either in an ordinary case, or in any case, to the responsibility of selecting the jury being left in the hands of any policeman who may happen to be on the spot?—I am not favourable to that.

8918. Mr. *Foster.*] Have you any suggestion to make regarding the individual with whom you would wish that selection to rest?—I could not make an off-hand suggestion on that point; I have not considered the matter very recently; I have thought about it frequently from time to time, but I have never contrived a remedy for it, inasmuch as I did not know that there would be a prospect of carrying any remedy into effect.

8919. A policeman has generally pretty accurate knowledge of the tradesmen and other people in the district, and the respectability of the persons, has he not?—Yes, but a policeman is frequently more or less benefited by the coal owner, and he might be biassed; in some instances, perhaps, his cottage is found by the coal owner, and his coal may be found by the coal owner.

8920. In default of the policeman, is there any other official that occurs to your mind whom you would suggest for this duty?—No, there is nothing that strikes me off-hand as a remedy for that. I do not believe that it is a crying evil; I think that the evil must have been a very slight one.

8921. The same objection as applies to policemen being employed for this duty would apply to any other kind of accident, would it not. In the event of a boiler explosion, for instance, the policeman, if he had any bias at all, might be equally biassed as in the case of a colliery accident?—Yes.

8922. And even in the case of an accident at a flour mill?—Yes, quite so.

8923. So that the case would scarcely be met by confining such a discretionary power to some other person purely in regard to the accidents in coal mines?—No, it would not be fully met.

8924. Mr. *Clive.*] Do you know how coroners' juries are summoned in general in other cases than colliery cases?—In general, the policeman goes round and summons them.

8925. In all cases is that so?—In all cases in my district, I believe.

8926. What was the plan before the rural police were created?—I think there was what was called the township constable, and he did it.

8927. Is not a policeman more likely to be unbiassed than a parish constable would have been?—I should think it would be about six of one to half a dozen of the other.

8928. With respect to this power of selection of jurymen, which it is proposed the inspector should have, would you have knowledge enough of the men who were on the jury to be able on particular occasions to challenge any of them?—I might on particular occasions make myself acquainted with them, but I do not know many of the tradesmen in the district.

8929. You think then that that power might be useless to an inspector, if it were given to him?—No, it might enable us to make inquiries previous to the inquest, but it would be very troublesome, and, without other changes, not always practicable.

8930. Would you have time for that duty?—No, not without the collieries losing the benefit of our inspection in other respects.

8931. Would it not make you in certain respects a partisan?—It would have that tendency.

8932. It would have a tendency at all events to make people believe that you were a partisan?—Yes.

8933. And you can suggest, as I understand you, no other person than the policeman for this work?—There is no other class of person that strikes me at the moment.

8934. Would you make it imperative upon the superintendent himself to attend to the duty; would you make him responsible for it?—I am not sure whether that could be accomplished; there might be two or three inquests going on at the same time, and he would not be able to be in two places at once.

8935. Viscount *Cranborne.*] With reference to the policeman summoning the jury, is it under any statute that the policeman has that power?—I do not happen to know that; I merely know the practice.

8936. Supposing that the policeman summons a man, and he does not come, what happens?—The coroner has the option of fining a man for not coming.

8937. Will the coroner always fine anybody that the policeman happens to select, if he does not come?—No, I think they generally frighten the man a little, and then excuse him.

8938. Do you know whether the policeman is the representative of the coroner in the summoning, or whether he has an independent power of his own?—I do not know the law of the case.

8939. Do you know whether the policeman summons any other juries besides coroners' juries?—I am not aware that he summons any other juries.

8940. Mr. *Clive.*] With reference to attending on coroners' inquests, I suppose that it is very often an irksome duty for a juryman?—The jurymen in my district complain very much indeed, because they get no pay.

8941. Do not they occasionally try to get off by bribing the policeman?—I cannot say; I never heard of it.

8942. It is a possible danger, however?—It is possible enough, but I have not heard of it.

8943. Mr. *Fawcett.*] Do you think that if power were given to inspectors to object to jurymen, that would remove the dissatisfaction which exists among the workmen with regard to the constitution of these juries?—I think it would tend a little in that direction.

8944. It would please them, you think?—Yes.

8945. *Chairman.*] Do you think that you are equal to all the work that is thrown upon you; do you think that you have time to do it?—As the Act appears to me to have contemplated its being done, I have; but that is quite apart from what might be done by way of extending the inspection. What was expected to be done, I believe I do.

8946. Do you think that an increase in the number of inspectors would lead to an improved management of mines?—To a certain extent I think it would do so, but if there were as many inspectors again as there now are, the benefits resulting from the second batch would be very much less than those resulting from the first, although, I suppose, the more inspectors, the closer the inspection that would be made.

8947. What is your opinion as to sub-inspection?—My opinion is that if there is to be an increased inspection, the appointment of sub-inspectors will be the best way of meeting that object.

8948. There are sub-inspectors in factories, are there not?—Yes.

8949. And you would recommend, I presume, if there is to be any increase of inspection, the

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appointment of the same class of officers in mines as there are in factories?—Yes, as sub-inspectors.

8950. Mr. *Kinnaird.*] From what class of men would you select the sub-inspectors?—First class over-men or under-viewers.

8951. That is to say, men who are thoroughly and practically conversant with the mines?—Yes.

8952. Which the superior inspector can hardly, from his training, be supposed to be?—Quite so; he cannot be supposed to be so conversant with the miners as such men.

8953. *Chairman.*] Those sub-inspectors should be responsible to the inspector, I presume?—Yes.

8954. They would make their reports to the inspector?—Yes.

8955. Would you recommend that their appointment should be subject to the approval of the inspector?—I think that would be desirable.

8956. How many sub-inspectors would you have in your district, if it were left to you to decide the question, without regard to expense, but looking only at the efficiency of the inspection?—I think that two sub-inspectors in my district would be ample.

8957. You do not think that that would have the effect of discharging the owners and managers of mines from responsibility?—It would tend in that direction; every increase of inspection would do so.

8958. You have read, perhaps, what Mr. Dickinson has stated to the Committee as his opinion upon that point?—I have.

8959. You do not quite concur in that, as I gather from your evidence?—Not quite.

8960. But you think that there is a good deal in it?—Yes.

8961. Mr. *Kinnaird.*] You do not agree with Mr. Dickinson, I presume, in saying that we ought not to go beyond existing legislation?—No, I do not go so far as that.

8962. You think that there might be considerable improvement upon existing legislation?—I do not say considerable improvement; I do not think that it would be very great, but there might be some, I think.

8963. Mr. *Clive.*] I presume that you would have an examination of the sub-inspectors for your district if any were appointed?—Yes; I think that it should be an examination by the inspector.

8964. Mr. *Liddell.*] Have you had occasion to send many other cases to arbitration than those which you have already mentioned?—No; I have only arbitrated one case excepting in regard to shafts; I have had half a dozen or eight arbitrations under the Act of 1862, which relates to the providing of a second shaft, for an extension of time; in one of the cases it was asked to be excused; and there have been some five or six others for getting an extension of time, but the arbitration is merely formal in those cases.

8965. Have you had no case of arbitration in regard to the framing of the special rules made at your suggestion?—No; I have had one arbitration about the practice of firing shots in broken workings, which I lost, of course.

8966. You say "of course;" do you go into arbitration, then, with the conviction that you will lose?—I keep my eyes as wide open on that subject as I can.

8967. Do you approve of the mode of arbitration under the Act?—I cannot say that I disapprove of it; I should not recommend pulling the reins very tightly in these things; I think they ought to be done carefully in legislating for or against only one class of persons.

8968. You mean, as I understand you, that you think the selection of the arbitrators should be left as it is now?—Yes, I think that it can scarcely be altered; it takes away the responsibility. If there were any great danger the arbitrators themselves would in general be obliged to give their decision in favour of the inspector. If he thought that the danger was not great, and the necessity for pursuing the practice was very great, then the arbitrator would, as it were, take the responsibility off the inspector, and in a measure off the viewer.

8969. And I need hardly ask you whether you are very much opposed to relieving owners and managers of pits of any share of responsibility which they have at present?—I am altogether opposed to that.

8970. Is not the fact of your only having had on these very few occasions to resort to arbitration, a proof that you work smoothly and harmoniously in your district with the owners and managers of the mine?—It is.

Monday, 11 *June* 1866.

PRESENT:

Mr. Ayrton.	Mr. Greenall.
Mr. Clive.	Mr. Kinnaird.
General Dunne.	Mr. Liddell.
Sir Philip Egerton.	Mr. Neate.
Mr W. Orme Foster.	Mr. Woods.

CHARLES NEATE, Esq., IN THE CHAIR.

THOMAS EVANS, Esq., called in; and Examined.

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8971. *Chairman.*] How long have you been an Inspector under the Act?—Eleven years last November.

8972. In what districts?—For nearly 10 years in the district of South Wales, and for the latter part of the time in the midland counties.

8973. You have only been for one or two years, then, an inspector in the midland counties?—Not quite two years.

8974. As to the employment of boys, what was the proportion of boys under 12 years of age, should you say, in South Wales to men?—I am not prepared with the exact figures.

8975. But in the rough, what was the proportion?—As a rule, in South Wales and the midland counties, no boy is employed under the age of 12 years; there may be some special exceptions.

8976. What do you mean when you say that, as a general rule, boys are not employed in those districts under 12?—The colliery owners and the managers of mines have a rule they will not employ boys under 12 years of age.

8977. That is to say, not if they know it?—Not if they know it, except in some special cases. In some of the collieries there is a special rule which prohibits the employment of boys of that age.

8978. What are the special cases in which they allow it?—The only case that has come immediately under my observation was one which occurred lately in Derbyshire, a widow with four or five children; she was very badly off, asked employment at a colliery for one of her boys who was under the age of 12 years, and the boy was employed in that case.

8979. Could that boy read?—Yes, he could read.

8980. Has there been any great alteration in that respect since the Act of 1860, or was there the same paucity of boys before 1860?—Before 1860, a boy could be employed under the age of 12.

8981. Have you noticed any change or improvement since the Act of 1860, in respect to the employment of boys?—Yes, decidedly.

8982. This abstinence from the employment of boys is partly owing to the Act of 1860, you think?—Quite so; practically, no boy is employed under the age of 12 years in the two districts.

8983. You say that in the districts with which you are acquainted there has been a general disposition in the owners of collieries to comply with the Act of 1860 as regards the employment of boys?—Yes, but not so with the men themselves; there is a great desire on the part of the men to take their children in at an earlier age.

8984. Should you say that that was an universal desire among the men?—Not universal, but it is very often the case.

8985. Should you say that the majority of the men desire to have their boys employed under 12 years of age?—I could scarcely answer that question, because I have not sufficiently inquired into the matter.

8986. Perhaps there is a great division of opinion among the working colliers about it?—It is quite clear that the boys need not be taken into the mines if the colliers would keep them themselves; but they insist in taking them into the mines at an early age.

8987. When there are boys in the mines it is owing, as I gather from you, to the desire of the men to send them there, and not owing to the desire of the masters to get them?—I think so.

8988. There are very few boys under 12 years of age employed in the two districts of which you speak?—Very few; I should, perhaps, say that in the South Wales district, and in the Midland Counties, the seams are of great thickness.

8989. So that they do not want boys there?—Not to the same extent as in other districts.

8990. What do the boys do in those districts up to the age of 12 who are not employed in the mines?—In some parts of South Wales (which is a very large district), boys are employed in the iron, copper, and tin works, but in other parts of Wales they have no employment for them at all, and in Derbyshire there is very little employment for boys.

8991. What do the parents do with boys who are not employed?—They keep them at home.

8992. Do they send them to school?—Some do.

8993. Are the boys better educated in those districts where they do not go into the mines before 12 years of age than they are in the others?—I am not prepared to answer that question.

8994. You are acquainted with ironworks, I suppose?—Yes.

8995. Comparing the work of a boy in iron works with the work of a boy in collieries, which should you say was the hardest and most danger-

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ous?—I think that the boys employed in ironworks work much harder, but, in point of danger, I think that the boys in mines are exposed to more danger.

8996. Accidents are very frequent in ironworks, are they not?—Not for the number employed, but there are accidents of course.

8997. Very severe burns sometimes happen there, do they not?—Yes, occasionally, but there are a great number of boys employed in that way; and if you take the proportion of those employed to the number of accidents, I think that it is very small.

8998. You think, as I understand you, that a parent careful and tender about his boy would rather send him to iron works than to collieries?—It depends upon where the boy has been brought up; a father generally prefers to bring up his boy to his own employment.

8999. We have had evidence to show that a boy who has been working in a colliery all day is specially reluctant to go and sit down in a school room, and more reluctant than a boy that might have been employed the same length of time in iron works; does your experience confirm that?—I know as a fact that boys are very reluctant to go to school after they have been working hard all day.

9000. Do you think that boys in collieries are more reluctant than those who have been employed in iron works?—I go very little into iron works of the Midland Counties.

9001. Do you refer to the iron works that come under the Act?—No, I was talking of iron works that do not come under the Act; I was referring to iron making.

9002. Are the hours of the boys in those districts of which you speak the same as the hours of the men?—The boys work 12 hours.

9003. In both the districts you speak of?—In both the districts. The men who work by piecework, work almost the number of hours they choose. Boys are supposed to work from six in the morning to six in the evening, but practically, in South Wales, they do not commence working till seven in the morning, and they very often finish at from four to five o'clock.

9004. What have you to say, supposing boys to be worked at all under 12 years of age, as to the hours which they should be allowed to work?—I do not think that boys should be allowed to work under the age of 12, down pits.

9005. After 12 years of age, would you subject them to any special regulations?—No; I think that the existing regulations are sufficient.

9006. You would leave them to be dealt with according as their parents or guardians might agree with the owners of the mines?—Yes.

9007. You would not make any regulation as to the number of hours that they should be employed after the age of 12?—No, I think not.

9008. But you are decidedly of opinion that they should not be allowed to go into pits at all under the age of 12 years?—Yes; but I must qualify it by saying that it would be in a few cases a great hardship. Although I think that no boy should work under 12 years of age down a pit, still in the case of the mother of a family who had several boys, and who had lost her husband by accident or otherwise, it would be very hard.

9009. Do you think that it would be possible to frame any rule under which such exceptions might be allowed?—I think that the present Act works very well in that respect, because there is such an objection on the part of managers to employ them under the age of 12, and it is only in the case of such hardships as I have referred to that they are employed.

9010. You think that you might still leave it lawful for the owners and managers of collieries to employ boys under the age of 12, and that they would not abuse the power?—No, I do not think they would.

9011. You are speaking of the two districts which you know?—Yes.

9012. You do not say that it would be so in other districts?—I do not see why it should not, but possibly it might be different where there are very thin mines.

9013. You think that in your district it might be left to the operation of the present rule, and that none but proper exceptions would be allowed?—I think so.

9014. As a general rule, you think it very undesirable that boys should go down a pit under 12 years of age?—I do, more especially in South Wales.

9015. At what age do the boys go into the ironworks?—There is no Act of Parliament to prevent them from going in at any age; of course it is a question whether they would be of any use or not.

9016. As a matter of fact, at what age do they go into ironworks?—I should think at the age of 9 or 10.

9017. Boys are taken into the ironworks under the age of 10, you think?—Yes, for carrying light bundles and so on.

9018. You have no alteration in the law, then, to suggest, as regards the employment of boys in collieries?—No, I think not.

9019. Looking to your own district, that is to say?—Looking to my own district, I think the present law works very well.

9020. Where, in consequence of the thickness of the seams, there is no special inducement to employ boys?—Quite so.

9021. Have you ever seen the working of mines where the seams are thin?—Yes.

9022. Do you think that in those thin mines, boys over the age of 12 could do the work?—Yes, I think they might do the work.

9023. You do not think that, even in those mines, it is a matter of necessity to have boys under 12 years of age?—I am not quite sure about that, because if they did not begin very early in the thin mines, there would be a great difficulty in getting them at all, and an early training to the business of working under ground in the thin mines is the only way in which you can teach them to become miners; and in other districts where there are works, such as cotton mills and so on, there would be a difficulty if boys were not employed under the age of 12.

9024. Do you think that in those special cases (if there are any) in which you would allow boys to work under the age of 12, it might be left to the discretion of the inspector to say whether he would allow the exception?—I think it would be better to leave it to the managers, as is now done.

9025. You think that what I suggest would be throwing a responsibility upon the inspector which he would not like to have?—I do not know that the inspector would object to it any further than

than this; it would be very difficult for him to know the exact merits of any particular case. The manager himself knows the parents and their position, and he would not be very easily imposed upon; whereas the inspector having a large number of collieries under his care, would not know the merits of each case.

9026. Supposing the manager were required to make a note of any boy under the age of 12, whom he wished to employ, and report it to the inspector, do you think that that regulation would work well?—I do not think that there is any necessity for it; he might enter it in a book kept at the mine.

9027. You are aware, perhaps, what the other inspectors have said about boys working in double shifts?—Yes.

9028. Do you agree in what they said as to the difficulty and danger of that practice?—I think that there would be great danger in changing the boys in the middle of the day's work.

9029. Mr. *Liddell.*] You said that boys are supposed to work from six to six, but that, practically, they go down at seven, and, for the most part, come up at four or five; now that makes at the outside from 9 to 10 hours' work?—Yes.

9030. Do you consider that too long for a boy under the age of 12?—Not if the boy is old enough to go in the mine.

9031. But I understand you to say that you have a strong objection to any boy going down the pit under 12 years of age?—Yes.

9032. Do you think that 9 or 10 hours' work is too much for a boy of that age?—Not on account of the work itself, but from the liability of the boys to accidents I object to their going underground.

9033. It is not from over work, but it is from the carelessness of boys of that age, and their constant liability to accident, that it is objectionable, in your view?—Yes.

9034. I presume that the recklessness of boys of that age forms another important element in regard to the changing of boys in the middle of the day, with regard to which you have expressed the opinion that it would be very objectionable?—Yes; practically I do not see how it could be done.

9035. The only way to meet the case is absolutely to prohibit their employment under 12, you think?—Yes.

9036. You do not, then, see your way to any change in the law, or to any change in the regulations of the pits, by which it would be safe, in your opinion, to employ boys under that age?—No, I do not.

9037. You have said that it would be very hard upon women to deprive them, in the event of their having lost their husbands, of the services of their boys; would not that be equally so, whether the boys could read or not?—Quite so; but I also said that I thought the present Act works very well in that respect, inasmuch as it gives the managers an opportunity of employing boys under that age in special cases.

9038. But if it is a hardship (which I quite admit it is) to deprive a widow, left destitute in the world, of the services of her son, it is equally so, is it not, under the present Act, which requires that the boy should be able to read if he is employed at all?—That is not required if he attends school.

9039. He may be employed under the age of 12, if he can show a certificate that he can read?—Or that he attends school so many hours a day or so many hours a week. There are a certain number of hours a week that he must attend at the school, if he is not able to read and write at the age of 10.

9040. If he is working 9 or 10 hours a day he cannot attend school, can he?—Not many hours; he might attend a night school for an hour or two on two or three nights in the week; not more than an hour or an hour and a-half.

9041. If he attends a night school, that is a sufficient compliance with the Act, is it?—Yes, I think so.

9042. You think he might, after he had been down the pit, attend the school two or three times a week?—Yes; and there is the Saturday afternoon, and the play Monday, which would afford time for school attendance.

9043. Do you think that the masters, in all cases, would overrule their natural objection to give employment to a boy, under the peculiar circumstance of his being the support of the family?—I know they would in many cases.

9044. Why do you say that the employment of boys under 12 years of age is specially objectionable in South Wales; is it owing to the thickness of the seam and a greater liability to accident from falls of roof?—Not altogether. South Wales coal is worked in very large blocks, and loaded into what they call trams, weighing 23 cwt. to 24 cwt. They are brought down on inclined planes to the level, and the trapper boys run before the horse down the incline, and some lose their lives by getting run over.

9045. If run over, they are either very seriously injured, or killed to a certainty?—Yes.

9046. In the event of any accident happening, from the pony falling, or anything else, the weight of these trams coming down the incline is very great?—Yes.

9047. Do many accidents of that sort occur?—A great many. They do not work with shafts in Wales. Two long chains are attached to the front of the tram, and the horse runs down a steep incline, a gradient of about 1 in 12, and the speed is regulated by stopping the wheels with wooden sprags, as they are called.

9048. Do you approve of that method of conveying coals?—No. I have recommended in my reports from year to year that they should adopt other means; and in some places they have done so, but in other places they do not think it practicable.

9049. The danger arising from the system of running heavy trams down an incline is not only one which refers to boys under 12 years of age, but it is dangerous to anybody, is it not?—Of course it is more dangerous to young boys, because men can get out of the way, and know the danger better.

9050. That is a practice which you consider to be a dangerous practice?—I do.

9051. And you have done your best to get it altered?—I have, and it has been altered in some cases.

9052. Would the danger be materially diminished by the use of shafts instead of these loose chains?—I think so.

9053. What particular objection is there to using shafts?—I think that one of the greatest objections is prejudice; I do not know of any other, in fact. They are obliged, from the nature of the coal, to load it into very large trams. The South Wales steam coal if made small is practically

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tically of no use, being only worth a shilling or two a ton.

9054. Because the atmosphere so very soon draws off the bitumen, does it not?—There is very little bitumen in it; what is known in the trade as the Aberdare steam coal, if it is at all small, is practically of no value in the market.

9055. But it is peculiarly liable to be affected by the atmosphere when kept, is it not?—It is, in warm climates or wet weather.

9056. Mr. *Foster*.] Are young boys employed at driving the horses, immediately after being introduced into the mines?—No; they are generally trapper boys, or door boys, and frequently they work with the man who has the stall; their father, or a friend it may be.

9057. The boys who are put to drive the horses would be of what age, do you think?—About 14, I should think.

9058. And they would be boys that had perhaps been down the pit for a couple or three years?—Yes; it is a skilful operation is that of tramming.

9059. What is the reason that steam coal is valueless comparatively unless brought up in very large masses?—The difficulty in burning it renders it so. The steam coal of South Wales is so free from bitumen that it will not coke; and without a strong blast of air it is very difficult to burn when small. The ironmasters in South Wales, within the last few years, have adopted a system of puddling with it, but that is with a fan blast.

9060. I suppose that the necessity of having a certificate for these boys between the ages of 10 and 12, acts as an inducement to the parents to send the boys to school, so that they may be able to read and write before the age of 10 or 11, and thus get employment in the mines?—No doubt it induces them to do so; in fact, it almost prohibits the employment of boys under 12. There is the inducement held out by that law, that if they can read and write between the ages of 10 and 12, they may be employed.

9061. The inconvenience of getting the monthly certificates acts as a prohibition; the masters would rather have the boys pass the ordeal of reading and writing at once before they go into the mines at all?—The masters would prefer it.

9062. And that acts as you have stated, as an inducement to the parents to give their boys such an amount of schooling before the age of 10 as shall qualify them to go down the mines?—With regard to the parents, I think that, as a rule, they would send the boys into the mines at 10 years of age, whether they could read or not.

9063. The Act of 1860 has tended to discourage, on the whole, the employment of boys under the age of 12 in mines, as I understand you?—No doubt of it.

9064. And you still think that, under special circumstances, it would be a hardship to prohibit their going down in all cases whatever, under that age?—Yes, I think it would be a hardship.

9065. Then you would not recommend any alteration in the provisions of the Act as regards boys?—No, not as regards boys.

9066. *Chairman*.] What is your opinion as to women?—There are no women employed in the Midland counties.

9067. There are in South Wales, are there not?—In South Wales there are a great many; not very many at colliery work, but at ironstone mines a very large number are employed.

9068. At ironstone mines under the Act, you mean, I presume?—They may be under the Act, or they may not; but that would depend upon circumstances.

9069. What is your opinion on the subject of the employment of women; do you think that there is much evil in it?—No, I do not.

9070. You do not recommend any alteration in that law as regards that?—Not the slightest.

9071. What is your opinion as to the feeling of the men on the subject?—I do not think that the men in South Wales have the slightest feeling or care anything about it; and the women are strong and healthy, almost more so than those employed in any other occupation I know of.

9072. Which is the worst employment for them, the employment at the pit's mouth of the coal mine, or on the ironstone mine?—I think there is very little difference; in the one case they assist on the bank in cleaning the coal, or unloading the coal, and in the other case they sort the ironstone.

9073. Which is the hardest and roughest work?—I think that they are both equally rough.

9074. As to ventilation, what are the great defects in the ventilation in either of the districts with which you are acquainted; taking the district of South Wales first, should you say generally that the first general rule of the Act of 1860 is satisfactorily complied with in the South Wales district?—I think that the ventilation of the mines in South Wales generally has immensely improved in the last few years.

9075. Improved since the Act of 1860?—Yes, and even a few years before that.

9076. You mean that the improvement had begun before that Act?—Yes, it had begun before that, and it has continued.

9077. Do you attribute that improvement to the benefit of inspection?—To some extent.

9078. There are still defects, I suppose?—No doubt there are.

9079. What is the nature of the defects generally?—By the system of working coal which is adopted in South Wales, it is very difficult to ventilate. In well-regulated mines there is a very large quantity of air passing through the mines, but in consequence of the great number of galleries and stalls through which the air has to be directed, there is some difficulty in the ventilation.

9080. Has the Act of 1862, requiring the second shaft, been generally complied with?—I think there is one case in my district in Derbyshire; and in South Wales there may be two or three in which it has not been complied with as regards two shafts.

9081. Did you report upon the non-compliance in that case in your own district?—They do, in one sense, comply with the Act of Parliament, although they have only one shaft.

9082. How can they comply with the Act of Parliament if they have only one shaft?—They are trying to make a communication between that and another shaft, and they do not employ more than the specified number of 20 persons.

9083. Under the Act of 1862, are they justified in employing 20 persons in a mine with only one shaft?—Yes.

9084. And they are setting themselves to comply with the Act fully by making a second shaft?

shaft?—They are trying to make a communication. In many cases it would be impossible to open out a colliery unless there were some arrangement of that sort.

9085. "This section shall not apply to opening a new mine for the purpose of searching for or proving materials, or to any working for the purpose of making a communication between two or more shafts, so long as not more than 20 persons are employed at any one time in the said new mine or working." Those are the words of the Act?—Yes.

9086. But that does not authorise them, even if they do not employ above 20 persons, to make a new mine with only one shaft?—No.

9087. Unless they are working for the purpose of making a communication between that shaft and another one?—Yes; then the question would arise, what is an old mine; some shafts take many years sinking.

9088. Have you ever taken proceedings against or reported any owners or managers of mines for not complying with that Act?—No.

9089. And you think that in those cases where they have not yet got two shafts, they are making them?—Yes.

9090. With reasonable diligence?—Yes.

9091. But still continuing to work the old shaft?—There is only one such case in my present district, and in two or three months there will be communication there between two shafts.

9092. Does that lead to any great defect in the ventilation of that particular mine that you are speaking of where there is only one shaft?—It is only making a communication from one shaft to another, and the amount of air required is very small.

9093. What are the defects of ventilation in South Wales; what do they chiefly consist in; is it the want of air ways?—The insufficient size of the air ways, in some cases; but I would not like to make a sweeping remark to the effect that the South Wales district is badly ventilated.

9094. There is no rule, is there, fixing the size which the air ways should be?—No, I think it would be impossible to have such a rule in a district like that; I think that there is no district in England which presents so many difficulties as the South Wales district.

9095. What are these peculiar difficulties in South Wales?—The immense quantity of gas that is given off, and the peculiar and dangerous cleavages of the coal; the natural inclination of the coal and the cross cleavages, or, as they are called, slips and backs; they form diamond-shaped lumps of coal which suddenly drop out without warning, and cause a great number of deaths.

9096. From falls of coal?—Yes, from falls of coal.

9097. Not from explosion?—No, not from explosion.

9098. Are these falls of coal sometimes accompanied with an outburst of gas?—In some cases the pressure of gas coming upon the coal suddenly, forces a very large quantity of coal down, or more especially the roof; I have never seen so much gas in any district as I have in the Aberdare district in South Wales.

9099. What other defects are there in the ventilation in South Wales?—Those which I have mentioned are defects that occur from day to day in every mine.

9100. If you have had to take proceedings from want of ventilation in South Wales, have you often had to take such proceedings?—Yes, many times.

9101. Have you found any difficulty in enforcing the penalty?—In some cases the penalty has been imposed.

9102. Have you generally been satisfied with the decisions in the cases which you have brought before the magistrates?—Yes, generally, but not always.

9103. In some cases, however, where you thought that you ought to have got a conviction you have not got one?—That is so.

9104. Has the full penalty usually been enforced?—No, I think not; I seldom press for the full penalty; the amount of money has never been the object with me, but merely to impress them with the necessity of complying with the Act.

9105. Do you take those proceedings for the violation of the rule upon your own responsibility?—I do not.

9106. You have to report the matter to the Home Office for permission to take those proceedings?—Yes.

9107. Do you always get that permission upon your statement?—Always.

9108. You have never been refused permission to proceed?—Never.

9109. Would there be any difficulty in getting a return of the number of proceedings that you have taken, and the decisions that have been given upon them?—None whatever; a return is made to the Home Office already.

9110. It is not included in your report, is it?—It may or may not be.

9111. Do you think that a more frequent inspection by inspectors would lead to improved ventilation?—No, I do not think it would.

9112. Do you ever go into a mine without special complaint being made to you?—Yes, I do in my present district.

9113. Did you in South Wales?—Not for the last four or five years.

9114. I suppose that in your present district you do so by way of making yourself more fully acquainted with the system of your new district?—Yes; and it is necessary that the people should know me, and that I should know the people.

9115. But your rule in South Wales was not to go to a new mine?—I was very well known there, and I knew what was doing in the district; I do not, of course, mean to say that I knew what was doing in each mine.

9116. You do not think that it would lead to improved ventilation that the inspectors of mines should more frequently, of their own accord, visit the mines?—I think not; I think that you would relieve the managers of a great responsibility, and would place it upon the inspectors, who could not possibly fulfil the duties, unless you had an unlimited number of inspectors.

9117. You do not think that it would lead to better management of the mines to appoint a greater number of inspectors?—Not so far as my own district is concerned.

9118. But the number of mines to be inspected has considerably increased, has it not, since the time of your appointment?—Yes, no doubt.

9119. There has been a very considerable increase in the working of coals since then?—Very large, no doubt.

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9120. And the number of inspectors has not been increased since 1860?—I do not think that the quantity of coal is the criterion.

9121. But not only has the quantity of coal been increased, but a number of new mines have been opened?—Yes, and others have been worked out.

9122. You have, however, more to look after now than there were in the district 10 years ago, have you not?—Yes, no doubt.

9123. Have you any idea what the amount of increase would be in Derbyshire, taking the number of new pits?—No, I could not tell that; I could estimate the quantity of coal, I think.

9124. How many collieries have you to look after?—About 205 or 206.

9125. Is that the number of the collieries or the number of the pits?—That is the number of the collieries.

9126. How many shafts or pits would there be in those collieries?—I should think about 600 or 700, but that is only a very rough estimate.

9127. Do you think that the appointment of sub-inspectors would be any great assistance to you in the discharge of your duties?—I am afraid not; I think that we should be constantly getting into trouble; we should be undoing and setting to rights with the managers and owners that which the sub-inspectors had been doing.

9128. Do you think (to begin first with your old district) that the men that were appointed to the post of firemen or viewers were usually competent men?—Under the circumstances they were the best men that they could get; it must be borne in mind the district developed itself in an extraordinarily short time in one part of it. I should think, in the course of ten years there would be an increase to the amount of three or four times the quantity of coal worked, the trade having grown so quickly they were obliged to employ such men as they could find, and they did take the best, no doubt, but perhaps not so good as they could have wished.

9129. But making allowance for the difficulty and the particular pressure that there was requiring them to find an increased number, you think that they took as good men as could be expected?—Yes, under the peculiar circumstances of the case.

9130. What were the wages of the viewers or firemen generally as compared with the earnings of the working miners in South Wales?—What a working miner would get now would depend entirely on how he worked, but a good miner might get 6 *s.* a day, I should think.

9131. What district are you speaking of now?—The Aberdare, which is now the principal district in South Wales; in Derbyshire the miners would get, I should think, from 5 *s.* to 6 *s.* a day.

9132. What are the weekly wages of firemen?—35 *s.*

9133. Is it generally considered a promotion to be made a fireman?—It is a stepping stone towards being overman, as it is called, or under viewer.

9134. So that the best workmen are usually desirous to be firemen?—They are.

9135. Do you think that that desire which exists in the best workmen to become firemen affords sufficient security for getting good men for that duty?—It is the only security that I know of.

9136. You have heard it suggested by different witnesses, perhaps, that the firemen should be subject to an examination to test their knowledge of gases?—The difficulty is to know who is to examine them, and besides practically there is no difficulty in knowing the presence of gas.

9137. With regard to the accidents which have come under your notice, have you found them in any or in many instances owing to the want of due diligence, or the want of due knowledge on the part of the firemen?—No, I may have known one or two accidents arising from want of diligence on the part of firemen.

9138. But has it been want of diligence rather than want of knowledge?—Yes, I should think so on the part of the firemen.

9139. You do not remember noticing firemen who were incompetent from want of knowledge to make a proper inspection when visiting the working places of the mines?—I would not say that.

9140. You have known incompetent firemen?—I have known men who have become incompetent from causes which they could themselves control, such as idleness.

9141. I mean incompetent from want of knowledge?—No, I think I have not known such cases.

9142. You make it your business to be acquainted with the special rules (I do not mean the special rules contained in the Act) which are in force in each colliery, do not you?—Yes.

9143. As a general thing, should you say that those rules are sufficient as to the visiting of the working places by the firemen?—Yes, I think so.

9144. As to the frequency of their visits, and as to the time at which they should be made?—Yes, I think so; if they are not, the inspector can easily have such a rule made.

9145. What general suggestion, if any, have you to make as to securing the ventilation of collieries; have you any alteration in the Act to suggest with that view?—No, I think not.

9146. In the cases that you have had to bring before the magistrates, have you found any great difficulty arising from the words, "under ordinary circumstances," which are contained in the first general rule?—No.

9147. Do you think that it would be fair to omit those words?—No, I think not. I understand the "ordinary circumstances" to be the condition of the mine as worked from day to day.

9148. You think, then, as I gather, that the best security for improved ventilation would be a better system of working the mines?—I think that probably that may come to pass some day, but it is a difficult thing to change the whole system of a district.

9149. It would be a matter of great expense, I suppose?—And more than that, the men would not have it; there would be such a prejudice on their part.

9150. The men would not like to be put to a new system of working, different from that which they had been accustomed to?—There is the gradual difficulty in making the slightest alteration, either in regard to an improved mode of working, or anything else.

9151. Are you acquainted with Mr. Dickinson's suggestion as to the working of mines?—Yes.

9152. Do you concur in his recommendation?—I think that that system would work very well, but it involves two or three difficulties which it would be hard to overcome; first of all, in South Wales, there is the expense in sinking their shafts, and

and then working out to the extreme end of their boundary before they commenced working coal. It would be a question of capital, and such a serious question that I could not answer it off hand.

9153. It is not a change that you think could be properly imposed upon the owners by rules?—No.

9154. Is there much waste of coal with the present system of working coal in South Wales?—Yes, considerable.

9155. A great deal that is not got out?—Yes, a good deal.

9156. And which, under Mr. Dickinson's system, or under an improved system, might be got out?—Yes, I think that by the system followed in Derbyshire, Nottingham, Warwickshire and Leicestershire there is very little coal left in.

9157. Very little waste, you mean?—Very little, but in South Wales there is a considerable quantity.

9158. Mr. *Greenall.*] As to inspection, you give it as your opinion that under this system of inspection very great benefits have been derived?—I am quite sure of it.

9159. But in those instances where workings have not been carried on upon the best system in the old works, does the system of inspection lead to the adoption of a better system of working in the new works?—Yes, and I think that there are some mines which without inspection would not have been worked at all, that is to say, mines which could not have been worked some years ago are now actually worked.

9160. Then may we conclude that inasmuch as under this system of inspection great benefits have been derived already, we may expect still greater benefits under this system?—Yes, but I do not think that the benefits that the public expect will be derived. There is always danger attending mine operations, and there always will be danger. The accidents from falls of roof (which are by far the greater number) depend upon the men themselves to a great extent, and no amount of inspection can prevent them. Then as regards ventilation in some districts, the minute details of a mine alter from day to day, and unless the manager was immediately responsible, for seeing to things himself, the ventilation perhaps of a whole district might be suddenly shut off, and the place filled with gas. No amount of inspection can stop that; people know there is an inspector in the district, and that complaints may be made to him of those matters, and that he will go and see into them.

9161. Those are things, you mean, which arise on the moment, and they must be met at once?—Quite so; and they constantly do arise.

9162. A great number of women, you say, are employed in South Wales in the stone mines?—A great number.

9163. Would you restrain the employment of women by legislation?—Not in the slightest.

9164. Do you know what wages they get?—Yes, they get 6*s.*, 8*s.*, 9*s.*, 10*s.*, and 12*s.* a week. I do not think that the occupation is half so bad as brick making.

9165. Do you know what their character is, as compared with other women, in the neighbourhood?—If you judge from their dress appearance on Sunday, I should think they are most respectable.

9166. Do they wear any special dress when they are employed at their work?—Not as they do in Lancashire; they are respectably dressed.

9167. Mr. *Foster.*] Do you not think that it would be impossible, by legislation, to lay down any universal system of ventilation or of working of mines?—Quite impossible.

9168. You are of opinion that the same system of ventilation would not always be necessary in different mines?—It could not always be carried out.

9169. Are you aware that ventilation varies from day to day in the same mine, and under the same system of ventilation?—No doubt.

9170. And that therefore no amount of Government inspection could at all times be responsible for the state of ventilation in any one mine under any system?—I think that directly you begin to make the Government responsible for the efficient ventilation of a mine, you will begin to have more accidents than there are now. It is quite impossible under the present system, or under any other system of inspection, to make the Government responsible.

9171. You are opposed, I understand, to any system of sub-inspectorship?—I do not think it would work well.

9172. You do not think that sub-inspectors would relieve the inspectors of their responsibility?—No, I think they would increase it.

9173. I suppose, then, you consider that as the number of colliers increase, it would be better to reduce the size of the districts, if necessary, than to employ sub-inspectors in the present large districts?—Yes, I would not employ sub-inspectors; possibly a re-arrangement of districts might be useful.

9174. In fact, when there was anything that the sub-inspector saw or told his chief about, the inspector could not rest satisfied unless he went and gave personal inspection to it himself?—Quite so; and of course no sub-inspector would carry any weight with him.

9175. Therefore it would not relieve the work of the inspector?—No, I think it would very much increase it. No sub-inspector would carry any weight with him into a district; and if he did, there would be a constant difficulty arising from the manager and the sub-inspector disagreeing, and the inspector having to go and see to the thing himself.

9176. With respect to the firemen employed in mines, are you of opinion that the best men for the purpose within reach of the masters are generally employed for the situations?—I think so; I think that the masters choose the best men they can get for the protection of their own property, irrespective of the safety of the lives of those employed.

9177. You see no reason why those men should undergo an examination?—I do not see what examination they could undergo.

9178. You do not see anyone exactly fitted to say whether a man is equal to being employed in such a situation or no?—No; for it is difficult to know what the colliery agent wants in a particular mine. A fireman's duty is not only to go and see whether a place is safe, but there is the conduct of the works, the management of the men, and several such things; a colliery manager wants a particular man to suit a particular place, and no amount of inspection or examination could find such a man.

9179. You do not think that an examination would

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would meet the requirements of the case at all? —I do not.

9180. Are you aware whether the engine-drivers on railways, to whom a vast amount of human life is intrusted, undergo an examination? —No, they do not.

9181. But companies, generally, employ the most sober and the best men they can obtain, I suppose?—Yes; up to a very recent date in South Wales, there was difficulty in finding a good man, and that was the language. It was almost necessary to get a man that could speak the language to fill the position of fireman; that is not quite so important now, however.

9182. I suppose it requires one qualification, which is good, sound, common sense? — No doubt.

9183. And which does not always come out in an examination?—No; it is best found out by the manager himself.

9184. Sir *Philip Egerton.*] I understand the evidence which you have given with reference to ventilation to refer principally to the South Wales district?—I refer also to Derbyshire and the Midland counties.

9185. Confining your attention to South Wales, are the mines in that district what are called fiery mines?—Some of them are very fiery.

9186. Large accumulations of explosive gas take place?—Large quantities come off, under great pressure.

9187. In the mines in South Wales, where they have these large quantities of explosive gas, are the disused workings properly fenced off under the second general rule?—In the fiery mines in Wales, as a rule, the roofs are so bad that the places fall in, and so prevent any entrance to them.

9188. Is the second rule carried out, so that the disused workings are fenced off from the actual workings?—As a general rule it is, but I know one or two cases where it is not so.

9189. On referring to the last report from the South Wales district, I find it stated that large accumulations of gas occur in old works or goaves, which are within a short distance of the stalls; are those old works or goaves fenced off, or is the ventilation carried through the old works?—Not generally carried through them.

9190. Do not you think that, in cases where these disused works are in close proximity to the actual works, it would be better to ventilate the old works than to fence them off?—No, I think it would be impossible to ventilate them. I think, however, the system there is a bad one as regards ventilation (*explaining it in detail on a sketch*).

9191. As regards the safety of the men employed, you think it better to alter the system of working than to endeavour to ventilate the goaves?—I would alter the system gradually, very gradually.

9192. Mr. Wales, in this report, states that "the veins are within a short distance of each other, so that the working of one frequently disturbs the working of the other." Does not that involve a complicated system of ventilation? —No, I think not; you work one in advance of the other.

9193. I suppose that the system of ventilation is furnace ventilation?—Furnace and mechanical ventilation.

9194. Are they suction engines, or air pumps, which are used for the mechanical ventilation? —All suction engines; they are fans, in fact.

9195. Are those two systems combined in the workings, or are some pits worked by furnace power and some by mechanical power?—I think that the deepest mine in South Wales, and perhaps the most fiery mine, is worked by means of a furnace and a very large ventilating machine, the largest ventilating machine in England.

9196. What is the position of the ventilating machine with reference to the up-cast shaft?—The ventilating machine is placed at some convenient distance from the top of the up-cast, and the air is conveyed by means of a large culvert. The furnace is at the bottom, of course.

9197. The two systems combined work harmoniously together?—In separate shafts.

9198. Then you have two upcast shafts?—Yes, two up-cast shafts; the power of the ventilating machine would be sufficient to draw the air down the shaft against the power of the furnace.

9199. Have you one down-cast shaft and two up-cast shafts?—There are three shafts, one down-cast shaft, 18 feet diameter; another shaft divided into two by a brattice, one side down-cast, the other up-cast; and a separate up-cast as well. The systems are distinct.

9200. Which, in your opinion, works the best? —I think that under certain circumstances mechanical ventilation is the best.

9201. As regards economy, what should you say is the best?—In shallow mines, no doubt mechanical ventilation; but in deep mines it is questionable; perhaps the furnace is most economical.

9202. But does not the having two distinct systems of ventilation in one mine necessarily complicate the direction of the current underground?—Not more so than any other means of ventilation.

9203. Is it directed by means of doors?—Or crossings, or some means of regulating it by slides, as the case may be.

9204. Are doors much used there?—In South Wales there is an immense number of doors used, and there must necessarily be; each of those places (*pointing to the sketch*) must have a door.

9205. Are those self-acting doors, or are they managed by boys?—They are not managed by boys, and I should think they are scarcely self-acting.

9206. Is an over-man or some one else appointed to attend the doors?—Yes.

9207. On the whole, do you think that the ventilation has improved since you have been in the South Wales district?—Yes, immensely.

9208. Have many suggestions which you have made on the subject been attended to?—Yes.

9209. I see in the last report of Mr. Wales, the statement that, notwithstanding the explosive nature of the gas in some of these mines in South Wales, gunpowder is allowed to be used?—That, I think, is most dangerous.

9210. Is that still the case?—Yes; I did, when in South Wales, report that same matter myself on several occasions; I have known one accident to result in the loss of 12 lives from gunpowder, and I have also known several other accidents and explosions that take place from the use of gunpowder in fiery mines.

9211. And that system, you say, still prevails? —It does, I am sorry to say.

9212. Do not you think that an increased amount

amount of ventilation would render the employment of gunpowder safe?—No, I think not; I think that wherever safety lamps are used in working coals gunpowder should not be used.

9213. With reference to the midland district, I see in your report of 1864 that there are three or four collieries complained of as having very deficient ventilation, Monkwood Colliery, Springfield Colliery, Kilburn Colliery, and Cinder Hill Colliery, in all of which you complain of defective ventilation?—Yes.

9214. It appears that those are small collieries, with the exception of Cinder Hill?—Monkwood is a small colliery, and Springfield also.

9215. In consequence of the complaints which you have made with reference to ventilation in those collieries, has any amelioration taken place?—Yes; in the case of the Monkwood Colliery (that was a new mine), after that investigation before the coroner, they employed a mining engineer, and since then there has been a great improvement in the ventilation.

9216. The principal complaint that you made there was that the ventilation was not conducted sufficiently near to the face of the coal?—Yes.

9217. In consequence of the brattice not being extended far enough?—Yes; or because there was not a "hole" made further in advance.

9218. Who is responsible for putting up the brattice, the owner or the collier?—The fireman or the deputy.

9219. Who is in the employment of the owner, is he not?—Yes, he is in the employment of the owner.

9220. In the case of Springfield Colliery, you complained that the air ways were "in a wretched condition"; has that been improved since then?—That is a wretched place now, but it is better than it was a great deal.

9221. The owner was convicted in that case?—Yes, the accident having occurred from want of ventilation; the Kilburn Colliery is very much improved, and in the Cinder Hill Colliery, after that explosion referred to in the report, they used safety lamps, and they engaged the services of Mr. Woodhouse, certainly the leading mining engineer in the midland counties, and he now has charge of that mine.

9222. Then the safety lamp is pretty generally employed in that district, I suppose?—No, not in four mines in the district.

9223. Notwithstanding your suggestion that the safety lamp should be employed?—At that Cinder Hill Colliery it is used now.

9224. As to Kilburn also, you state that "sufficient care was not taken to exclude naked lights"?—That was at a particular district of the mine; there are several mines which are worked generally with naked lights, but a particular district of it is worked with safety lamps.

9225. The Monkwood Colliery you recommended should be "worked exclusively with locked lamps"; is that the case now?—Yes.

9226. They have followed out your suggestion, then?—They have.

9227. On the whole, you think that the ventilation is improving year by year in the districts to which your attention has been called?—Yes; in the midland counties the ventilation is a matter very easily managed; the coal is all worked together from the bottom of the shaft; there is simply one current of air passing down the face of the works and up the up-cast shaft, and there are no doors.

9228. It is much more simple ventilation than that required in South Wales?—Yes, it is a totally different thing.

9229. General *Dunne.*] Can an owner be punished if he does not use the safety lamp when the inspector recommends it?—No.

9230. But in case of an accident occurring, would not the fact of the inspector having objected to the practice, increase the punishment?—There is no law to compel the colliery owner to use safety lamps.

9231. Would you suggest any law to require it wherever the inspector pointed it out?—No, I have never found any difficulty in getting colliery owners to use safety lamps where I have suggested it.

9232. Do you think that if the first rule of the Act were carried out there would be any objection to the use of gunpowder?—Yes, for coal.

9233. Under any circumstances?—Yes, under any circumstances for coal; there may be parts of the roof which it would be impossible to get down without the use of gunpowder.

9234. Mr. *Woods.*] Then you would not recommend any legislative prohibition against the use of gunpowder, because there are cases, in your opinion in which it must be used?—I think I would not interfere with it.

9235. When you were just now being examined by Sir Philip Egerton about the Welsh coal field, you said that you would recommend another system of working; why do they not in South Wales adopt the system that you have recommended?—I do not make a sweeping recommendation that they should do a certain thing, but I say that I think the system is a bad one as regards ventilation, and as regards the quantity of coal got out; but it is one thing to suggest an improvement, and it is another thing to carry it out. The prejudice of them and other matters to be considered.

9236. But you said, I think, just now, that you had recommended in South Wales a different system of working, namely, the same as that which is adopted in the midland counties, and that they did not adopt it?—I meant to say they had adopted it in some mines, but not altogether; in fact, I think that in the Aberdare district nearly all the six-feet vein of coal is worked by the longwall system; but the nine-feet vein is the most dangerous coal in England, owing to its thickness.

9237. Were you talking of the nine-feet vein in the answers which you gave to Sir Philip Egerton?—No, of the six-feet vein.

9238. Can you inform us why they do not adopt that other system which you spoke of?—First of all, it is very difficult to change the system of any colliery. If you look at that plan, you will see that it would be difficult now to make it into a long-wall working (*pointing to the Plan*). Then the nine-feet seam of coal is, in consequence of its thickness, very dangerous.

9239. Explosively dangerous, do you mean?—In consequence of the thickness of the coal, it is dangerous from falls of roof, and the peculiar cleavages which I before referred to. They lie in that way (*describing it*), forming blocks of immense lumps of coal, and varying from three to four tons, and they suddenly fall out without any warning.

9240. Then the peculiar nature of the coal of the roof renders it difficult to work the nine-feet seam on that long-work system?—Yes; first, the

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thickness of the blocks, and then the fact that there is not sufficient stuff to fill in the space behind them in the nine feet of coal.

9241. These are the peculiarities which belong to the mine, and the district of which you are speaking?—Yes, quite so.

9242. And which render a special mode of working that mine more desirable?—Yes.

9243. In fact, the Committee are to understand that it is not the mere arbitrary will of the owner of the mine that prevents another system being adopted?—Just so.

9244. You say, as to mechanical ventilation, that you have both systems in work, and that the mechanical is the stronger?—Yes.

9245. Do these fans work for ever, without stopping?—Unless there is a breakage.

9246. How do they manage for ventilation during the time of the stoppage or breakage of the fan?—There is nothing but the natural ventilation; of course, in a case of that sort the men would be all taken out of the colliery, and the valves opened, and the natural ventilation would be sufficient.

9247. What is the chief reason for adopting mechanical ventilation as compared with the furnace, or rather what is your chief reason for recommending it in shallow mines?—You can get a greater pressure.

9248. A greater exhaustion?—A greater exhaustion.

9249. Will you fix the depth to which you apply the term "shallow"?—From 170 to 180 yards, perhaps.

9250. What is a deep mine, if one of 170 yards is a shallow one?—200 to 300 yards would be deep.

9251. Given the same temperature in the up-cast shaft, of course the exhaustive power depends upon its depth?—No doubt, but it is almost impossible to get a large quantity of air through an extensive mine if you have not a long column in the up-cast shaft to rarify it.

9252. What would you describe as being the difference between the best constructed fans that you know and a shaft of any depth you like to name; what is the difference of exhaustive power?—It would entirely depend upon the pressure and the speed you work the machine at.

9253. Will you tell the Committee the general size of one of the fans that you have been speaking of. First, will you tell us what a fan is; a fan is a mere machine like a ship's paddle, is it not?—Yes. something like it.

9254. In a case?—Yes, in a case.

9255. Of what size?—Varying from 20 to 30 feet diameter.

9256. At what speed does it revolve?—120 or 130 revolutions in the minute.

9257. It is the centrifugal force of the air which causes its being whirled round?—Yes.

9258. And it depends very much upon the speed what the ventilation is?—Yes.

9259. Do those things require to stop to be oiled?—No.

9260. They can go night and day without cessation?—Yes.

9261. What power of steam engine do they require to drive them?—Very small; 10 or 12 to 30 horse-power.

9262. What is the reason that they are not more generally adopted?—I do not know any good reason why they are not, except that the shallower mines contain very little gas.

9263. What is the reason that they are not of more general adoption all over Scotland and England?—In the north of England the shafts are deep, and they have very well constructed furnaces, and the furnace ventilation is better perhaps than they could get from mechanical ventilation; but they even are now erecting machines.

9264. Which is the most expensive to work, the machine or the furnace?—The furnace of a shallow mine.

9265. Would you think it wise to recommend in an Act of Parliament that there should be mechanical ventilation?—No, I think not.

9266. Speaking generally, do you approve of the principle of introducing in Acts of Parliament statutory declarations as to what kind of machinery should be used under the varied circumstances of different mines?—I do not think it is practicable to do so.

9267. For instance, would you think it a desirable thing to introduce into an Act of Parliament a provision that a particular patent for hoisting men from the mine should be used?—No, because there may be a far better patent invented to-morrow.

9268. You would object to the principle?—Yes.

9269. General *Dunne.*] Would you think it advisable to leave it to some competent authority to find fault where the appliances were faulty; for instance, to the inspector?—The inspector does that now.

9270. If he sends intimation of that to the Secretary of State, has the Secretary of State the power to alter it?—If it is any violation of the rule. If, for instance, they have a bad steam gauge; if there is a defective safety-valve; or if there is a bad water gauge, then, if the owner does not alter that and make it good, the inspector has power enough to insist upon its being done, or, rather, to take proceedings before a magistrate.

9271. But those are a certain number of things provided for in the Act of Parliament?—Yes.

9272. Would you not give a more extensive power to the Secretary of State on the recommendation of the inspector that certain things are desirable which are not now in the Act of Parliament?—No, I think not. There is now a system of arbitration, and the inspector may arbitrate, if he thinks the provisions of the Act not effectual.

9273. By whom is the arbitrator appointed?—By the colliery owner.

9274. And is there any chance of an arbitrator so appointed deciding against the owner?—Very little, I should think. I have never had but one, and that was in my favour.

9275. Would you propose a reform of that system of arbitration by law?—I think that the Secretary of State or (which is the same thing) the inspector of mines of the district should appoint one arbitrator, and the colliery owner appoint another. I think that if there is a change made, that would be desirable.

9276. Mr. *Woods.*] With reference to the ventilation of the goaves, on this plan of the South Wales system, they appear to be up and down brow; the workings are driven on the level?—Yes, east and west.

9277. On the level?—Yes.

9278. What is the system of ventilating the goaf after it is made and finished. Is the air

passed

passed along the face of it; is the main air way made to pass along the outside boundary of it?—Yes, it ought to be so. Of course when this is exhausted (*pointing to the Plan*) there is no ventilation, but it is shut off completely, because there is no air passing through there (*pointing it out*).

9279. There ought to be air passing around it if possible?—Yes.

9280. Of course it would be a very good plan if the air way could pass along the higher side of it?—Yes.

9281. But at any rate you think there should be one passing along one or other of the sides of it at all times?—I think there should be a current of air passing around the edges of the goaf (*explaining it on the sketch*).

9282. You say that it is impossible to undertake to pass air through the goaf?—Yes, I think so.

9283. Can you recommend any system beyond what is now done in the well managed collieries, for ventilating the goaf?—Perhaps not as a general rule; but there may be a particular case which would require particular treatment.

9284. Is there a great diversity of condition between the well and ill managed collieries in your district, as to their tendency to explosion?—In my present district the quantity of gas given off is very limited indeed.

9285. In South Wales, was there not till recently a great diversity between the well and ill managed collieries, as to their tendency to explosion?—From the beginning there was a great difference; I think I have attended more inquests at large accidents, than perhaps any other inspector. The first was the one at Cymmer, in which case there were 114 men killed, and then the ventilation was very defective.

9286. If there is a great difference in collieries do you think that the result of inspection has been to improve the condition of the worst of them, and to bring them up to be more like the better managed collieries?—Yes, I think so.

9287. Is there still some difference between them?—There is still a considerable difference, and they may be improved still.

9288. Do you think that the system of inspection tends to that result?—Yes.

9289. *Chairman.*] During the whole time that you were in Wales, was there any colliery that you did not visit?—Yes.

9290. Although you have been 10 years in Wales, there are some collieries which you have never been down?—Yes.

9291. If an inspector went down a colliery, and looked at all the contrivances and apparatuses for ventilation, in order to see generally whether the airways were sufficient, whether they were kept sufficiently clear, whether the brattices were of the right sort, whether the apparatus for fixing the brattice to the roof, so as to make an air-tight passage, was sufficient; do not you think that he would be able to form an opinion as to whether proper precautions had been taken for the ventilation of that mine?—I think it would be quite out of the question; no manager of a mine could do all that you point out; no manager, at least, of a large extensive colliery could undertake that duty.

9292. There are differences in quality of the brattice cloth, are there not?—Yes, but there is very little in that.

9293. There is a difference in the way in which the doors are closed, is there not?—Yes.

9294. Do not you suppose that if you went into a mine and passed a day there, or half a day, although you would not report whether every single corner and working place of that mine had the air properly brought up to it, you could have a general idea as to whether proper care was taken for the ventilation of that mine?—No, I do not think you could; I constantly go down mines now in which I spend whole days, and I merely know what is done in that particular district of the mine which I have been into.

9295. You were speaking just now of South Wales, and of the accidents which have occurred there; in the mines that there have been accidents in, did you notice whether the general apparatus for ventilation was in a satisfactory condition?—No, not always.

9296. Do you think that there is some connection between accidents and a generally deficient state of the ventilating apparatus?—Not always.

9297. There may be accidents where the general apparatus is very satisfactory?—Yes.

9298. But if the general apparatus is deficient and inadequate, accidents are more likely to occur?—No doubt.

9299. Do not you think that you could form some idea as to whether due care was taken for the ventilation of a mine by a general inspection of the size of the airways, the clearness of the airways, the sufficiency of the fans (if the ventilation were done by fans), the size of the furnace, the size of the up-cast shaft, the brattices, and the apparatus given to the workmen for fixing the brattices?—No, that would be quite impossible, I think; I might do this; I might go to the mine and see the plans, and see the arrangements they had for creating the ventilation, that the engine was good, and so on; I may know the quantity of air that circulates through the mine; and see the extent of it from the plan, and I can form a general opinion from the direction in which the air is made to pass, whether it is done scientifically and properly; but to go down into a mine, and to look at the size of the airways and the brattice, and see whether the underviewers and the overmen have done their duty in every respect is an impossibility.

9300. I am not supposing that you are to inquire into the details, but do not you think that there are cases in which accidents have happened in mines, and in which if you, or any other inspector had been some months, or some time before, into the mine, you would have been able to report to the Home Secretary that the mine was in a defective state, and to take proceedings under the Arbitration Clause, and that the accident might have been prevented in that way?—I think possibly it might be so.

9301. Do not you think it very likely?—I do not know of a case of that kind, but it might be so.

9302. There was an accident in the Springfield Colliery, was there not?—Yes.

9303. Do you suppose that if you had been into the Springfield Colliery, and looked it over, you would not have seen that the ventilation was in a defective state?—I should have seen, perhaps, that the ventilation generally was not in a good state, but not this particular stall.

9304. Would you not have seen enough to have enabled you to recommend the Home Office to take

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take proceedings?—No; I might have seen enough to enable me to remonstrate with the owner.

9305. And that spontaneous visit of yours might have been the means of avoiding the accident?—It might have been, or it might not have been.

9306. Do not you think it very likely that it would have been?—I think very likely it would have been in that particular case.

9307. And if in that case, in others too, I presume?—I think it may be so.

9308. Do not you think that without throwing on the inspector the responsibility of managing collieries, more frequent visits of inspectors, spontaneous and unexpected visits of inspectors, I mean, would increase the security of those who have to work in the mines?—No, I do not think it would, but I think it would very much lessen it.

9309. Perhaps you think that if there were no inspectors at all it would be better?—I think that if you proceed, as is suggested, to make them responsible, and they are to run up and down pits at two o'clock in the morning, then the sooner you do away with inspection the better.

9310. You think that we have just arrived at the exact point of the number of inspectors to do the work properly, and that more or less would be a disadvantage?—No, I do not say that; I think that if it were wanted the Secretary of State has the power to appoint more.

9311. It is open to this Committee to give advice to the Secretary of State; do you think that the security of the workers in mines would be attained, and the working in mines improved, by a greater number of inspectors?—I do not think so.

9312. In the case of the Springfield Mine, a penalty was imposed, was it not?—Yes.

9313. The maximum penalty for that would be 20*l.* under the first general rule?—Yes.

9314. As a matter of economy, and looking only to economy, it might answer very well, I presume, for an owner of mines to go on violating the rule, and he would gain more by saving the expense which he would be put to to comply properly with the rule than he would lose by incurring the penalty?—No, I think decidedly not; I think that the mere imposition of the penalty is nothing; the loss entailed by an explosion varies, and I have known it to amount to very many thousand pounds.

9315. That would be so in a particular case; but there are other causes of accident, which merely involved loss of life to the workmen, and which do not entail any great expense upon the coal owner; an accident from fall of roof does not entail any great expense upon the owner of the mine, for instance, does it?—It may; under Lord Campbell's Act, proceedings have been taken.

9316. You say that in the case of an explosion there is no use in increasing the penalty, because the penalty of 20*l.* is a very small part of the loss; and there is rarely at any rate any serious explosion which does not entail great loss upon the owner; but I ask whether there are not other accidents in which there is no loss to the owner, with the exception of the penalty?—That would be a very trifling explosion indeed.

9317. I am speaking of other accidents not arising by explosion, for instance accidents by fall of roof, accidents by falling down the shaft, or by falling down where there is a gallery which comes in half way down the shaft; there are many accidents, in fact, which may happen without entailing any pecuniary loss upon the owner, are there not;—Yes.

9318. Do you think that it is desirable, with a view to those causes of accident, to increase the penalty?—No, I think not; I cannot conceive of any colliery owner working a place when he knew of his own knowledge that it was in such a state that it was likely an explosion would result.

9319. Mr. *Woods.*] That remark would relate to all accidents, I presume?—Yes.

9320. If a colliery had a very ill repute in the neighbourhood it would stand at a disadvantage in the rate of wages that it would have to pay, I apprehend?—No doubt of it; every explosion sends up the price of coal at that particular colliery.

9321. *Chairman.*] Have you had much to do with the clause respecting umpires?—No, not much.

9322. Mr. *Woods.*] A good deal has been said about the examination of brattices, and so on; brattices, I apprehend, are essentially within the details of ventilation?—Quite so.

9323. Brattices never control a main airway?—No, they ought not to, and they do not, practically.

9324. In any well managed colliery is the main airway controlled by a brattice or curtain?—No.

9325. So that examining into brattices is examining into the every day details of a colliery?—Yes, the petty details.

9326. And if an inspector examined into things of that sort he would have to live in the mine almost?—It is an impossibility.

9327. With regard to fencing off, do you understand the fencing off, spoken of in the second general rule, to be locking off of gas within the goaves, or a fencing off to prevent or warn men from going in?—There has been a great deal of discussion about that; I think it means that supposing a working place to have been worked for some time, and that, from some cause or other, the place is stopped for a short time with the object of its being worked again, then the entrance should be fenced so as to prevent men from getting into it.

9328. You do not propose to fence off such goaves, or any other part of the mine, by locking them off by brick and mortar walls?—No.

9329. On the contrary, you recommend their being kept open with the view of getting rid of all the gas again with as much facility at possible?—Yes. I do not consider that rule to be of much use; it might be as well expunged, because the first general rule is sufficient for all purposes.

9330. It has been recommended to appoint a great many sub-inspectors, do you recommend any such system?—No, I think it would have a bad effect.

9331. As to the management of a mine, is it a fact that, having regard to the present state of the labour market, the influence of the colliers upon their employers would be very great if judiciously exerted in the question of ventilation?—No doubt about it.

9332. That is to say, if the colliers were themselves to take individual and united action, that would very materially influence the degree of ventilation, and the goodness of the management, and

and so on, prevailing in any particular colliery?—Yes, and more than that, I think that if any one collier found that his place was not properly ventilated, and represented that to the owner of the colliery, in ninety-nine cases out of a hundred that place would be put right.

9333. Of course, any sum like 20 *l.* or any multiple of 20 *l.*, is as nothing, compared with the rate of wages in a colliery being increased?—Nothing; the mere conviction is not the only thing; it does not matter whether it is 5 *s.* or 50 *l.*

9334. *Chairman.*] I understand that you would leave out the second general rule?—I think it would be of no use. As regards my own district, I think it quite immaterial. In the system of long-work, the rooms are extended so far that we have no places left where gas could accumulate.

9335. But although it is of no great use in your district, it might be of use in other districts?—It might be, but I do not see how it could be.

9336. Have you any suggestion to make upon the third general rule about safety lamps?—No.

9337. Is that third rule generally observed in your district?—I am afraid not.

9338. Are you speaking now of your present district?—Yes.

9339. Has not the penalty been enforced, if the rule is not observed?—I think that it has in one case last year. It is such a new thing in the district to use the safety lamp that there is very great difficulty in getting it introduced.

9340. There is great difficulty to get the workmen to use it, you mean?—Very great difficulty; and I found that in one or two cases, lamps had been used which were not locked.

9341. But it is the business of the mine owner and manager to provide a person to examine and lock lamps, is it not?—Yes.

9342. Is that done?—It is.

9343. If that is done what is the difficulty in enforcing the rule?—In a colliery that is worked altogether with safety lamps, there is no difficulty in seeing that this rule is carried out, but where there are certain districts only of a mine worked by safety lamps, there is a certain laxness about the matter.

9344. Did you hear what was said about that sort of lamp they use in Belgium, a lamp with a glass round that part which is opposite the light, the Meuseler lamp I refer to?—I think it is a very good lamp, indeed.

9345. Do you see any objection to its general use where safety lamps are used at all?—No, I do not.

9346. Do you think it the best form of safety lamp?—I think it a very good safety lamp; I do not say the best; I do not think it a good lamp for the fireman to make an examination with in the morning.

9347. You do not think it a good testing lamp?—It goes out in gas, and that would be objectionable to a fireman. There is a tube inside the gauze, above the glass in the chimney, and directly so much gas passes to the flame, and there is an insufficient supply of oxygen, the light goes out.

9348. The one that I refer to is merely the ordinary Davy lamp; but instead of having gauze all the way down it has glass round that part of the lamp which is opposite the flame?—Yes; inside the gauze it has a small tin tube tapering up, and of course the gas or the air presses in at the bottom, and directly the Meuseler lamp is inserted into any gas, it goes out for want of oxygen.

9349. It reveals the presence of gas then, but it leaves the fireman in the dark?—Yes, quite so; and as by the rules he is prevented from carrying matches it would subject him to difficulty; I think it a very useful lamp for working colliers.

9350. Is the fourth rule about fencing shafts and pits generally complied with?—Yes, I think so.

9351. Is the lining or casing of the shafts properly attended to?—Yes, all the shafts in the Midland counties are walled with brick from top to bottom. When I say "all," I mean as a general rule.

9352. Was that so in Wales too, when you were the inspector there?—No; all the Welsh pits are sunk an immense size, 16 to 17 feet long, and 12 feet wide.

9353. Do you mean then that rule was not properly attended to in Wales?—I say that the shafts were not walled there, as a rule.

9354. Were they otherwise securely cased or lined?—They wanted a great deal of examination, and very much care.

9355. You say then that the sixth rule has not been satisfactorily attended to in South Wales?—I should say that the pits in South Wales would have been better if they had been walled; but now they never think of sinking a pit in South Wales without walling it; it would be difficult, however, to alter all the others.

9356. Is rule seven, as to providing signalling, satisfactorily attended to?—Yes.

9357. And the signalling on the engine planes?—Yes.

9358. As to the refuges, is the rule with reference to them complied with?—The refuges are made, and have been of great use.

9359. But in your last published report, you say that "seven lives were lost by 'being crushed against the sides' or 'run over' by tubs or trams"; you also say this, "The places of refuge have been found, especially on inclined planes, most useful, and in many cases independent roads are made for travelling on, parallel with the inclines"?—Yes.

9360. But you do not say how many of those lives, if any, were lost by the want of a proper number of places of refuge?—No; it was merely a general observation that the places of refuge had been of a great deal of use.

9361. Were these places of refuge on that particular occasion there referred to?—That paragraph mentions them, I think.

9362. You say that seven lives were lost by being crushed or being run over; in either case, the accident might have happened for want of places of refuge?—That does not follow.

9363. It might have happened by carelessness, that is to say, through the men not using the places of refuge, or it might have happened from there being no places of refuge?—If it had been so, most likely it would have been referred to by me.

9364. Was not your attention directed to it; did not you go to this mine?—The seven lives were lost at seven different collieries.

9365. Did not you go to these different collieries?—Most likely I did.

9366. Cannot you say whether the accidents were caused by want of sufficient places of refuge?

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fuge?—I do not think they were, but I cannot remember now; that report was written in 1864.

9367. What is your general impression as to their compliance with that part of the law which requires them to have places of refuge; has it been generally complied with?—Yes.

9368. Have you made it your business to see in the mines you have visited that there are places of refuge every 20 yards?—Yes, and I have found that there were cases where the law had not been complied with, and I got them made at once.

9369. But you have not taken proceedings where that was the case?—No.

9370. You might have taken proceedings as for a wilful violation of the Act?—Yes, but there would have been no object in doing so; in one case I remember, there was no place of refuge, but it was a mere oversight, and it was made at once when I pointed it out to them.

9371. Was this a new mine, or a new pit?—Yes, a new incline from the surface.

9372. And you use your own discretion as to whether you take proceedings or not?—No.

9373. But you do not think yourself bound to consult the Home Office, as to whether you shall take proceedings when you find the rules not attended to?—I always consult the Home Office; the proceedings are never taken without consulting the Home Office.

9374. But they are often omitted too, are they not, without consulting the Home Office?—No, I do not know that they are. The instructions which we received from the Home Office last year were these, that in cases of death resulting from accidents in mines, and caused by a violation of the law, penalties should be sought for, and in cases of accident, where any special facts might arise, those should be reported to the Home Office.

9375. But supposing you visited a colliery (I mean without any accident having occurred), and found that there were only places of refuge every 50 yards, should you not take proceedings in such a case?—No.

9376. Could you conceive that to be anything else but a wilful violation of the Act of Parliament?—It would depend upon circumstances.

9377. I am speaking now of a pit that may have been opened since 1860. You go into that pit, say, and you find that there are 50 yards between the places of refuge; should you not then consider it your duty to take proceedings?—If a man had been killed or injured from the want of a place of refuge, I should take proceedings, or rather represent it to the Home Office. If I found that there was no place of refuge provided, and if they would not at once promise me that the thing should be done without delay, possibly proceedings would be taken. But I should generally get an assurance from them that the place of refuge would be instantly made, or as soon as practicable, and most probably in a few days, the owner or the manager would write to me, saying, "We have done as you wished."

9378. But as there are a great many mines which you do not know, and which you do not go into habitually, or even at all, except in case of accident, there may be a great many mines in the district you are in, and in the one which you have left, in which there is wilful violation of the provisions of the law?—I have no doubt that there may be places which have not been provided with places of refuge every 20 yards.

9379. Do not you think that it is a great encouragement to the owners of collieries to neglect the law if they know that when found out they only have to comply with it, and that no further notice is taken of the thing?—I do not think that is so. If a man is killed on an inclined plane, and there is no place of refuge, and that man's friends take proceedings under Lord Campbell's Act, they can recover. There was a case like that recently decided in Liverpool, where 150*l.* was awarded. I do not see what more can be required of an inspector when an owner does comply with the law after he has pointed it out to him; I do not see what else the owner can do.

9380. Do not you conceive that it is the duty of the inspector to see that the law is enforced, by the exacting of the penalty which the statute imposes for the breach of the law?—I do not think that it was ever intended that the inspector should go round as a policeman, looking about for little petty matters that are wrong, and bringing the owners before the magistrate when they are willing to comply with the law.

9381. Being crushed is a very common cause of accident, is it not?—It may happen on the engine plane.

9382. Do you think that a trifling infraction of the law?—I do not know that it is any infraction of the law at all; a hundred men may be injured without any infraction of the law.

9383. Do you think that the omission to supply places of refuge is a slight infraction of the law?—No, I do not say it is.

9384. Mr. *Clive.*] The Chairman's question means this, why should you wait till a man is killed or injured before you proceed against the owner; is it that you are not numerous enough, as inspectors, to visit all the collieries?—We do not visit all the collieries, and we are not numerous enough to do that.

9385. But do not you think that, in the event of your visiting a colliery, and enforcing penalties against the owner for not having supplied a sufficient number of places of refuge, that would act as a warning to other owners, and lead them to see that those places of refuge were made?—I think that, probably, the owners expect that they are all made.

9386. Whose fault is it, then, that they are not made?—Generally it is the fault of the underviewer.

9387. Then somebody should look after the underviewer?—Yes, of course, the owner is at last responsible.

9388. Do not you think it would be better that, in some instance where that rule was neglected, there should be a conviction, in order to give warning to other owners?—There have been convictions.

9389. But not until after an accident has happened, I suppose?—Before accidents there have been convictions.

9390. That has actually been done, you say?—That has been done. I do not say for want of places of refuge; but, for instance, for not having a steam gauge, there has been a conviction before the boiler has burst. I have had a case before the magistrates, which has entailed immense expense; and I had several of the most scientific men

men in the country brought into Wales on the question.

9391. Have you had a conviction in those cases without an accident having happened?—Yes, without an accident.

9392. Why should you not extend that to the question of places of refuge?—It may have been extended to that; I do not know that it is not.

9393. Mr. *Greenall.*] Did it ever occur to you when as inspector you have visited a colliery, that you have seen that there was not sufficient provision in the way of places of refuge?—Soon after the Act passed, I saw such cases constantly.

9394. Have you ever suggested in those cases that more places of refuge should be provided?—Yes, after the passing of the Act I sent a circular round to the collieries, pointing out the new provisions of the Act of Parliament.

9395. Have those suggestions been complied with?—I think as a general rule, and indeed almost universally throughout my district, places of refuge are made; there may be some exceptional cases where they do not exist.

9396. Should you hesitate on visiting a mine to intimate to the owner that there was a want of sufficient provision in regard to any matter which you saw, and to acquaint the proprietor of the mine that certain things were required?—Certainly not.

9397. And would they be supplied on your suggestion?—They always have been.

9398. You have always found proprietors of mines willing to meet suggestions which you have made on those points?—Yes; there may have been one or two cases in which we disagreed, and then the question has been settled by arbitration; but in other cases I have had no difficulty.

9399. Is your time fully occupied by the duties which you have to discharge?—Yes.

9400. But you do not feel that you are overworked, do you?—No.

9401. Mr. *Woods.*] These places of refuge, I presume, are not necessary on any inclines, except those which are described as self-acting inclines, or those having machinery or steam engines; but it is quite possible, I apprehend, that persons may be crushed to death on the general slope of the mine, where there is no machinery, by the weight of a waggon which may overrun the drawer, or in some such way as that?—Yes, that is the case which I tried to describe this morning, when I spoke of the boys in South Wales being constantly run over.

9402. Is it the general disposition of the mine owners and managers in your district to endeavour to fulfil the law, or do you find their disposition to be the reverse?—I think that they try to comply with it.

9403. Supposing you found any of them obstinately and perversely trying to thwart you, of course, those men you would make an example of?—Very soon.

9404. But you would be more inclined to give a little time to make alterations which you might suggest, even if there had been infractions of the law, to those who were generally disposed to adopt your suggestions?—I would, and for this reason, that very often they carry out things which they do not consider necessary, and which they do not consider the law requires, merely because I suggest them; I have known that to be the case frequently.

9405. And you do not consider it as any part of the duty which the legislature imposes upon inspectors to take up the position or the spirit of a common informer?—Certainly not.

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9406. *Chairman.*] You conceive yourself at liberty to take proceedings or to apply to the Secretary of State to take proceedings, even although there should be no accident?—Certainly, and I have done so in many cases.

9407. Mr. *Woods.*] Do you think that it would tend to the wise and useful influence of an inspector if he were to become a mere carper, and to render himself as disagreeable to the owners of mines as he could?—I think that possibly he might get the law carried out to the letter if he were to do so, but not in its spirit; a great many things would he left undone, and the great benefit that is supposed to result from inspection would not result from it.

9408. *Chairman.*] Looking at rule 9, which relates to a sufficient cover being provided over head when lowering or raising persons, is that generally attended to?—Yes.

9409. Rule 10 says, "No single linked chain shall be used for lowering or raising persons in any working pit or shaft, except the short coupling chain attached to the cage or load;" is that rule generally attended to?—I do not know a single case now of a single linked chain.

9410. You have not known, then, of any accident occurring from the want of attention to that rule?—I have known many accidents occur formerly from that cause.

9411. But not recently?—I do not know of a single linked chain in use. The last was used by Mr. Crawshay Bailey, the Member for Newport; he had one in use at Aberaman; that is last that I remember.

9412. As you are going round the country do not you sometimes stop and go to the pit's mouth and see whether the raising apparatus is all right?—Yes, I have done so.

9413. It would not take you a great deal of time, I presume; you might just give an eye to see whether all was going on right?—I think it is well that the inspector should not go to the top or the bottom of a pit unless he makes a thorough inspection of it.

9414. Will you pass your eye over the remaining general rules and say whether you have any suggestions to make to the Committee relating to them?—I think that rule 13, as regards water guages, requires some explanation.

9415. That rule is, "Every steam boiler shall be provided with a proper steam gauge, water gauge, and safety valve." Will you state what you have to say upon that?—In South Wales the water gauges used are two water cocks, two ordinary brass taps; I did not think that those taps indicated the height of water in the boiler; and some five or six years ago I suggested it to the Dowlais Company, that they should provide other gauges for their boilers which would indicate the exact height of water.

9416. Sir *Philip Egerton.*] A graduated glass tube you mean, I presume?—Or something else that should show the exact height of water in the boiler. They did not do so, and proceedings were taken against them.

9417. *Chairman.*] Was it under the Arbitration Clause that those proceedings were taken?—No, before a magistrate.

9418. Had any accident occurred?—No; but it was an important question, and I wanted it

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settled. A great many witnesses were called. I called Mr. Rennie, Mr. Fairbairn, and, in fact, many leading engineers of the time; and after many days hearing of the case the magistrate decided that water cocks were a sufficient gauge, and of course there was no conviction, and the result has been that no proper water gauge has been used since in Wales.

9419. You think, as I gather from you, that the terms of that rule should be made more precise as to what is a water gauge?—I do; but I think it is well understood in all other districts.

9420. Have you got any form of words to suggest to the Committee as a substitute for the words of that rule?—No, I think not.

9421. Perhaps if you should think on consideration that you have hit upon the right form of words, you will send them to us?—Yes; I want something to indicate the exact height of water in the boiler, and so show the approach to danger when the water gets low in the boiler.

9422. Mr. *Woods.*] Do you remember the time when that was the only kind of water gauge that was used in locomotive engines: two cocks, one above the other?—Yes.

9423. Mr. *Foster.*] Are you aware whether in the district in which you now are, the magistrates take the same view of the case as the magistrates in South Wales?—I do not know; the case was heard before a stipendiary magistrate when I was in South Wales, and his decision was against me, and I should not like to take another case before a magistrate in that district.

9424. In the district where you now are, what means are taken to show the height of water?—Floats.

9425. With a lever?—Yes, revolving round a wheel. As the water rises or lowers in the boiler the gauge shows the decrease or increase.

9426. *Chairman.*] Have you anything to say about the 14th or 15th general rule?—No, I think not.

9427. In the districts of South Wales and the Midland counties has there been much danger from an accumulation of water?—There have been a good many inundations.

9428. Do you think then that the 15th rule has been generally attended to?—There have been accidents from inundations; and in one case, that of the Lynch Colliery, I took proceedings against the colliery owners for not having proper bore holes, which the rule requires. In another case, at the Main Colliery, where there were five lives lost, they did not happen to have bore holes in the right direction.

9429. What was the result in that case?—There were no proceedings taken in that case; the bore holes were there, but even if the bore holes had been properly made (by the evidence given at the inquest the three bore holes required by the Act were made), the accident might not have been prevented, and the verdict in that case was accidental death.

9430. There was want of circumspection or judgment, at any rate, in the way in which the bore holes were made, I presume?—I do not think there was.

9431. What do you understand by the term "sufficient," do you think that it means sufficient in number or sufficient in size?—Sufficient in direction and in number; of course it is no use having two bore holes going in exactly the same direction.

9432. Mr. *Clive.*] What was the nature of the water; was it from the canal?—No, it was water that had been standing in an old working; the plans were old.

9433. *Chairman.*] This accident happened then from want of plans more than anything else; from want of knowing where the water was?—Yes, there is no doubt that if there had been exact plans there would have been very few inundations.

9434. Do you find that plans are generally kept?—Plans are now kept strictly, but old plans are incorrect, and are not to be relied upon.

9435. Were you satisfied with the verdict of accidental death in that case?—Yes, I think that the man used his best judgment, and the accident was not to have been expected by him.

9436. As to the framing of the special rules, do you think that they are framed in a satisfactory manner, and that sufficient notice is given to the workmen of what the rules are proposed to be?—I think so.

9437. The workmen sometimes say that they do not know what the special rules are, and that they have not had sufficient notice of them before they are enacted; do you think that there is a sufficient ground for that complaint?—I think it is very likely that they do not know what they are; they are supposed to be exhibited for 14 days in the office, and, in fact, they are exhibited for 14 days in the office, but I should scarcely think that the men read them.

9438. In what office are they exhibited?—In the office where the men are paid.

9439. As a matter of fact, you think that the special rules may be exhibited without the workmen taking any notice of them?—Yes, I think so.

9440. Do you think that it is the fault of the workmen if they do not take notice of them?—No, I do not think it is in large mines; it would be almost impossible in those cases for all the workmen to see them.

9441. You think, then, that greater care might be taken, and ought to be taken for the publication of any special rules before they are passed?—The rules of the collieries in each district are pretty much alike; there is very little difference indeed between them. For instance, if you take the county of Derby the rules in that county for all the collieries are almost the same. If a man get a copy of the rules at one of these collieries, and goes to any other colliery to work, he may be almost sure that the rules are the same.

9442. Are you generally satisfied with the special rules?—Yes; of course sometimes alterations are necessary, and I make them.

9443. Do you think it would be unreasonable that the workmen should be invited to concur by their deputies in the enactment of those special rules?—I think there would be no objection to that, but they take very little interest in the matter, for they do not even apply for the rules now. Under the former Act of Parliament the owner was obliged to supply them with copies of the special rules, but they so constantly lost them, and took so little notice of them that under the last Act the owner was not obliged to supply them with copies until they applied for them themselves; they seldom do apply for them.

9444. Have you often occasion to inquire into the contract rules?—No; excepting that they are sometimes bound up with the special rules.

9445. As

9445. As an inspector you have nothing to do with them?—No, except to object to their being so bound up with the special rules.

9446. In the contract rules there is sometimes contained a power of imposing fines, is there not?—Yes; but I do not think they hold good.

9447. Do you think it an objectionable practice that a workman should bind himself to submit to a fine in case of the neglect of such rules?—I do not think he does bind himself.

9448. But are they not liable to fines in some instances by their contract rules?—I do not think so; I think you would find in regard to these contract rules, that if a man took proceedings in a county court he could recover fines levied under them.

9449. I am speaking not of the legal question, but of the fact. Do you think it an objectionable practice that the master should take by the contract rules a power of fining the workmen, or what we should call at Oxford, "Sconcing" them?—I think it would be better not to interfere between the master and the men, but let them make any arrangement they like in that way.

9450. You do not see anything so objectionable then in that pratice as to render it necessary for legislation to interfere?—I do not like it, but I should not like to interfere in it.

9451. With reference to the accidents that have happened in your district as mentioned in your report, will you refer to the accident No. 44, of the rope breaking, and to what you say with reference to the verdict of the coroner's jury at Swadlincote; I see you state there, "I examined the rope and found it perfectly rotten in half a dozen places, and it was shown in evidence that although the engineer knew this rope had been so exposed, he did not take the trouble to do his duty, as pointed out by the special rules, and examine the rope before giving it to the deceased. I pointed out to the jury that if this duty had been properly performed the poor man's life would not have been sacrified," and you observe, "It is difficult how, in face of the evidence, a verdict of accidental death was arrived at"?—Yes.

9452. Of course you were very dissatisfied with that verdict?—I was.

9453. Have you known other verdicts with which you were dissatisfied as inspector?—I have no doubt that I have not agreed with all the verdicts that have been given in my district, but I cannot remember every particular case. That was a gross case to which allusion is made there.

9454. Looking to the general experience that you have had as inspector of coroners' verdicts, are you satisfied with the composition of coroners' juries in these cases of mining accidents?—Not always, In one case in Nottinghamshire, where a man was killed at a colliery, the manager and the overman of the colliery itself at which the man was killed were two of the jurymen; that I did not think was right, and I represented it to the chief constable.

9455. What was the composition of the jury in this Swadlincote accident?—They were the little tradesmen of the village, and there may have been a collier or two on the jury; that I do not remember.

9456. You are not aware whether any of the upper workmen in the mine were there?—I do not think there were.

9457. You have, as I understand you, nothing special to point out as a defect in the composition of that jury?—No, but I did not agree with their verdict; I thought it was a most strange verdict.

9458. You have heard it suggested, I dare say, that a certain number, say, half of the jury, should be composed of working colliers; do you think that that would be practically desirable?—I think not. I think that working colliers would give their opinion, and they would find their verdict, not from facts, but from prejudice and strong feeling.

9459. Have you generally been satisfied with the way in which the juries have been selected by the constable?—Not always.

9460. Could you suggest any better way of selecting the jury than leaving it to the constable?—No, I do not know who else is to do it.

9461. Is it usual, according to your experience, for the constable to refer to the head constable or superintendent before he makes the selection of jurymen, and to submit his list to him?—No, I should think not.

9462. You represented to the chief constable, you say, in this Nottinghamshire case which you have alluded to, the impropriety of putting the overman and the manager upon the jury?—I did.

9463. What was the result of that representation?—He told me that he had given instructions to the police officers of the county, and that it should not occur again.

9464. You cannot suggest any better mode either of selecting or of composing the jury than is now in force?—No; it is a difficult matter in country districts to get a jury at all, and we are obliged to take what we can get. Generally speaking, when there is any doubt as to the nature of the accident, if there is any supposed negligence, we have a very respectable jury selected from the best tradesmen of the neighbouring villages.

9465. Have you generally found, when you have attended a jury, that the witnesses called to give evidence about the accident were properly selected?—The policeman generally summons the person who was present at death, and perhaps the man working with the deceased the day of the accident.

9466. Have you had occasion, as inspector, to say that other witnesses should be summoned?—If I have thought so, I have always had them summoned.

9467. Do you mean that you have sometimes had occasion to require other witnesses to be summoned?—Many times.

9468. Mr. *Woods.*] You have the power to adjourn the jury from time to time, have you not?—The coroner has that power. I have generally found the coroner quite willing and ready to assist in carrying out the law in every possible respect.

9469. Mr. *Greenall.*] You spoke about evidence having been given, that the rope, in the case to which you have referred just now, was in very bad condition; do you know whether any conflicting evidence was given on that occasion?—It is two years ago, and I do not remember, but most likely they said that they did not know that the rope was a bad one. In that case the widow, if she did not actually take proceedings, at all events intended taking proceedings, under Lord Campbell's Act; but I think that an arrangement was made.

9470. I did not allude to that; but you stated just now that you heard given in evidence the bad

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bad condition of the rope; I want to know whether there was any conflicting evidence given by other witnesses to the effect that the rope was not in bad condition?—No, on the face of the rope, that could not be said.

9471. You consider that in that case the verdict was against the evidence?—I think so.

9472. Mr. *Clive.*] If you had had a right to challenge the jurymen, would you have objected, in the case that you have spoken of, to these two persons, the overman and the other?—I should.

9473. You would have struck them off the jury, and let them find any one else they could?—Yes, and without the right to challenge, I would have done so, but I did not know it till after. There is no difficulty with the coroner.

9474. You had not knowledge enough of the district to object at the time to these two jurymen?—No, not then.

9475. Mr. *Foster.*] You are not disposed to think that it would be, on the whole, any advantage to lay down an Act of Parliament that the jury should always consist, in part, of a certain number of working men?—No, I do not, and I think that other men are just as good on the jury.

9476. Do any objections strike you against making that a condition in an Act of Parliament?—Often you could not get the required number of colliers.

9477. Do you think that they would be considered as marked partisans, and that there would be a necessary suspicion that there were two parties among the jury?—Yes, I think that a collier is likely to form his opinion, not from the evidence, but from prejudices. He is not so likely to form his opinion from the facts on the evidence as a man perfectly disinterested would be.

9478. *Chairman.*] Is it the practice of the coroner to show you the list of the jurymen after they are sworn, in order to know whether you have any suggestion to make?—I do not know that he actually shows the inspector a list, but the coroner and the inspector are generally on such terms that the coroner not only suggests but asks what course he must adopt.

9479. He does not, however, submit a list of the jurymen to you?—No, he does not.

9480. Do you think that it might be a convenient thing if he put a list of the jurymen before you, and said, "Are you satisfied with that list"?—I do not know that it would be of any use, because you can always see it now if you wish.

9481. Do you think, then, that it would be a good practice that you should always ask to see a list of jurymen before they are sworn, setting forth a description of the persons?—Perhaps so.

9482. You say that if you had known in any one case to which you have just alluded, that there were an overman and a viewer on the list, before they had been sworn, you would have objected?—Yes.

9483. If you had had that list submitted to you, with a description showing who they were, you would have had the opportunity of objecting in that case?—Yes.

9484. Do you see any difficulty in establishing the practice, that, before the jury are sworn, a list should be submitted to the inspector?—No, I do not see any difficulty in it.

9485. Do you think that good would result from that in the selection of jurymen?—I think that the coroner is the responsible person for that; I should merely suggest to the coroner anything that I thought necessary, and say to him, "What do you think of this or that"?

9486. So you might do if you had the list put before you, might you not?—Yes.

9487. I believe that, in the case of that accident at the Swadlincote Colliery, the engineer was dismissed, was he not?—He was dismissed, but he was taken back again afterwards.

9488. You state, in your report, that "the engineer was not allowed to occupy the position after the inquiry"; how long was he suspended?—He was suspended for some time, but he was taken on again.

9489. Do you mean in the same colliery?—Yes; but not in the same position.

9490. In what position was he taken on again?—I think, as a blacksmith.

9491. Do you happen to know whether anything was paid to the widow of the man who was killed?—I think she got 40*l.*; I did not know the amount till this morning.

9492. You attended the other day, did you not, as a witness upon a trial in which the question was, whether a certain mine came under the description of the Act as an ironstone mine in the coal measures?—Yes.

9493. Can you describe to us what was the nature of the doubt that arose in that case?—The ironstone mines in the district (at Chesterfield) are about six yards above the coal; 40 or 50 years ago the coal had been worked away from this property, and the old shafts filled in; five or six years since the present owners reopened the old shafts down to the blackshale ironstone, which is six yards above the coal; they worked the blackshale ironstone from this old coal shaft, and a communication was made from the old workings in the blackshale with the new ironstone workings; the communication was not such as you could pass through, but it was such that water flowed through freely, and that gas which had accumulated there for years in the old workings rose through these cracks into the new ironstone workings.

9494. Mr. *Clive.*] From the old colliery workings?—Yes, from the old colliery workings.

9495. And through the pit that had been made to reach them?—Not through the pit, but through the hole and cracks.

9496. Were they filled up or not?—The level had not been filled up; the shaft had been filled. In two or three places the cracks were so large that the men were obliged to take sand and stop up the cracks, in order to prevent a quantity of gas coming through and stopping them from working; the other part of the case was that underneath this blackshale ironstone there is a small vein of coal, which we call smut; it is only four or five inches thick, and it is of no mercantile value, but it is coal which is burned in the cabins on the top of the pit.

9497. *Chairman.*] That they get out you mean?—That they get out; my case is that the ironstone is worked through an old shaft, and that a communication is worked in connection with the mine, inasmuch as the air and the gas pass through these cracks, and then there is this small smut.

9498. They made a new shaft for the ironstone, did they not?—No, they opened a communication with the old shaft.

9499. And

9499. And brought out the ironstone through the old shaft?—Yes; the engine for winding from these shafts is placed in the middle of a field, and the shafts are all round it; there are two of these mines close together; in one case there are 16 different shafts worked by one engine at various distances, and of various depths, and only a few of them can be seen by the engine man. Some men were going to their work one morning (of course they went down in empty cages, or carriages), and when they were near the bottom, and the carriages in the other shafts, were near the top, suddenly the whole machinery was reversed, and two boys were killed; one of the wheels had broken at the engine in consequence, I think, of the unequal distribution of the weight. That was the reason why the matter was brought under my notice, and why proceedings were taken. They contend, however, that the inspector has no jurisdiction.

9500. Because it does not come under the Act of 1860?—Yes. The Act says that the provision contained in it shall extend to all mines "worked in connection with coal, or with any disused or exhausted coal mines." The magistrates decided that they were worked in connection with a disused mine.

9501. Could you suggest any words that would make the law clearer, and avoid the possibility of a doubt in such a case?—I think that all ironstone mines of the coal measures should be included in the Act.

9502. So they are in terms now, are they not?—No; it says all ironstone mines "of the coal measures and worked in connection with coal, or with any disused or exhausted coal mines."

9503. You would leave out those additional words, then, as I understand you?—Yes.

9504. But would you extend the Act to all ironstone mines, whether or not in the coal measures?—I think not; because, if you did, it would then include all the hematite mines and limestone mines, and the mines of Cornwall.

9505. And you do not think it desirable to include them?—I think not.

9506. But you would have the description simply "all ironstone mines"?—Yes. After the decision in the case to which I have referred, the gentleman asked for a case to the Court of Queen's Bench; but a letter this morning from the solicitor tells me that inasmuch as a Government measure is anticipated by them this year, they will not proceed with the question before the Queen's Bench, so that the whole matter is left in doubt again.

9507. He got a case to the Court of Queen's Bench, but will not proceed with it?—Just so; and so the whole case is left in doubt again; and we do not know what the meaning of the Act is.

9508. Is there anything else which you would wish to suggest to the Committee, or any other point on which you would wish to give evidence?—I think not. Perhaps I may say here, that in reading over the evidence of one of the men from Derbyshire who has been examined before this Committee (I do not want, of course, to contradict this man's evidence, or to detract from what he said), I find he says that he was at the West Staveley and the Wingerworth Collieries, and that he had never seen the inspector down those collieries. Now it is very likely that he never did see the inspector down them; but it is a strange fact that I did visit Staveley Colliery not many months before, and not thinking the ventilation good, had summoned the owner before the magistrate, and the penalty had been imposed. I only mention this to show that a good deal may be done by inspectors, and yet the men may know nothing of it.

9509. Mr. *Woods.*] You had summoned him before the magistrate, and the magistrate had convicted him?—That is so.

9510. *Chairman.*] Had you been there in consequence of a complaint which had been made to you?—No; I had been there in consequence of their not giving me notice of an accident which I had heard of through the police constable, or coroner, I do not remember which.

9511. Upon what ground did you take proceedings in that case?—They did not give me notice; and the ventilation was not satisfactory.

9512. You recovered a penalty on the ground of the ventilation not being satisfactory?—Yes.

9513. The penalty was recovered; that is to say, under the first General Rule?—Yes.

9514. Is there any penalty for not giving notice?—Yes, a penalty of 20 *l.*

9515. You did not recover both penalties, however, in this case, did you?—I am not quite sure that I did not. There were two or three penalties recovered, but I forget now which they were.

9516. You would consider not giving notice to be a very serious violation of the rule, would you not?—Yes, if the colliery was in a bad state I should consider it so. If notice had been inadvertently neglected, and I went to the colliery and found that the venlilation was perfect, and that the not giving notice was a mere omission of duty, I do not know that I should take proceedings in such a case. But, in the case to which I have referred, I went to the colliery, no notice having been given, and found that the ventilation was not satisfactory, and I thought that that was a strong case.

9517. Should you think that, in any case, the owner of a mine should be excused for not giving you notice if there had been loss of life?—No.

9518. The clause says, "personal injury"; of course the obligation to give notice must depend upon the nature of the personal injury?—Not in cases of explosion. If you read the clause you will see that that notice is to be given in all cases of explosion.

9519. "If and when loss of life or any personal injury occurs by reason of any explosion"; those are the words?—Yes.

9520. Even if a man burns his beard must notice be given?—If a man is not burnt at all, but an explosion takes place, it should be reported.

9521. There must be some personal injury, must there not?—Quite so; but I could scarcely understand the expression, "an explosion taking place," without somebody being burnt.

9522. Mr. *Woods.*] Why should not an explosion take place without somebody being burnt?—You cannot have an explosion without a naked light, and a naked light is generally in the hand of somebody.

9523. Somebody must carry the light there?—Somebody must carry the light there.

9524. Mr. *Kinnaird.*] There is no such thing as an explosion without a cause, in your experience, since you have been an inspector?—There have

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have been a great many in which we could not trace the cause.

9525. There is always some cause?—Yes.

9526. Mr. *Woods.*] Have you ever known an explosion where the gas fired at the furnace?—Yes.

2527. There might have been nobody there, perhaps?—I should rather say it was supposed to fire at the furnace.

9528. Mr. *Kinnaird.*] That is the most unlikely place, is it not?—It depends upon the character of the mine, and the quantity of the gas.

9529. *Chairman.*] Is there any other suggestion or correction of any evidence that you have had your attention called to?—I think not.

9530. Sir *Philip Egerton.*] With regard to the 21st clause of the Act, which provides that notice should be given to the inspector of the abandonment and opening of mines, is that properly carried out in your district?—I do not think it is thoroughly carried out. I think that that part of it with regard to the opening of mines is carried out.

9531. Do not you think that notice with regard to the closing of all mines is equally important?—Not of so much consequence, I think, as in the other case.

9532. The provision in that clause is: "Where any such mine or colliery is abandoned, or the working thereof discontinued, the owner thereof shall cause the same to be, and to be kept securely fenced for the prevention of accidents." In case you got no notice of the abandonment of the mine, of course you could not be expected to see that that provision is carried out?—No, unless you happen to go to that particular place.

9533. Therefore, when you say that it is not of so much consequence to have notice of the abandonment of the mine, is it not important in that view of the case?—I think it is very important, but not of so much importance as in the other case. On the opening of a mine, you go and see that they have proper water gauges, and proper winding machinery for the commencement of their works, and you see that proper special rules are made.

9534. But for the protection of the public, do not you think it important that the inspector should know when collieries are abandoned in order that proper fences may be put up for the prevention of accidents?—Yes, I think he should be informed.

9535. Are you aware that many accidents have taken place from abandoned pits not being securely fenced in metalliferous mines where no such clause exists?—Yes, I have known of them, and I have known of them in coal mines too.

9536. Are you aware that petitions have been presented from the magistrates in several Welsh counties, praying Parliament to enact that all abandoned mines shall be fenced?—I am not aware of it, but I can easily imagine that it may be so; for in Pembrokeshire you sometimes see four or five abandoned shafts in the same field.

9537. Are you aware that the Royal Commission of Mines have recommended that an efficient and easily available legal remedy should be provided in order to guard the public from this prolific source of danger?—I am aware that that was one of their recommendations; that is already provided for in the Act.

9538. Mr. *Kinnaird.*] Have you had a copy of that Report of the Royal Commission furnished you from the Home Office?—Yes.

9539. And you have read it, I presume?—I have read a good deal of it; I do not know that I have read the whole of it, but I read the summary of it.

9540. Would it be desirable for you, do you think, to make yourself familiar with its recommendations?—The circumstances in a coal mine are different from the circumstances in a metallic mine; I am pretty well acquainted with them. There is one matter that I should like to mention to the Committee. In some parts of the district the men have to pay for their timber, and I think that it is objectionable; if men are charged for their timber, although they do not pay the actual value, or anything like the actual value, of the timber, there is an inducement to them to save a little money, and not use as much timber as they would otherwise do.

9541. *Chairman.*] It is an inducement to them, in fact, to purchase economy at the risk of the lives of other people as well as at the risk of their own lives?—I think so; and within this last year I attended an inquest where that was the cause of the accident; it was an accident at an ironstone mine, in which a boy was killed. I did not get any notice of the accident, but the coroner wrote to ask me to attend the inquest, and I went; it was a question whether it did come within the jurisdiction of the inspector or not; but, as I say, I went, and the evidence was very strong that there was a very insufficient supply of timber. In that case the timber was supplied by a butty collier, who bought the timber from the company: he was employed at a first-rate concern, the largest in my district, and it is the general custom that the butty man shall supply the timber to the collier at this fixed price.

9542. The butty charges it to the men under him?—The butty charges it to the men under him.

9543. Where was this?—It was an ironstone mine belonging to the Butterly Iron Company.

9544. What was the reason of the doubt whether it came under the Act?—They were working ironstone.

9545. That was the same sort of doubt, in fact, as occurred the other day at the trial to which you have referred?—Yes; I wrote to the general manager, Mr. Bean, and told him what had taken place at the inquest; that the men represented that there was a scarcity of timber, but that I had thought that there was a doubt as to whether the mine came within the meaning of the Act or not, and that until this other case of Mr. Fowler's was decided, I did not think it well for me to interfere in it.

9546. You think it an objectionable practice, as I understand you, then, whether in ironstone mines or in coal mines, to charge the men for supplying them with timber?—Yes.

9547. Does the practice exist in South Wales?—I never heard of it there.

9548. Have you made any representations to the owners or managers of mines about it?—I have.

9549. Have those representations been attended to at all?—The practice has not been altered.

9550. There is no legal power to interfere in the matter?—No.

9551. Do you think that it would be desirable to

to have such a legal power?—I think it may be done without a legal power, possibly.

9552. It can be done if people choose, of course; but if people adhere to that as a convenient and ancient practice, it requires legal power to prevent it, does it not?—I think that it should be inserted in the special rules, but perhaps not in the Act of Parliament.

9553. You would, in the special rules, have a rule forbidding the practice of charging the men for the timber?—I do not think that the men ought to pay for timber; but I would not make it a provision of an Act of Parliament unless there was some extension of time. I think that the alterations should not take place until a little time had been given them, and that there should not be a sweeping alteration made all at once.

9554. This particular alteration might be made with little notice, might it not?—No; I think there is the question of wages affected by it.

9555. It would not take much time to settle that, would it?—That is a very serious question in these days.

9556. You think, as I understand you, that, subject to the question of time, it is an objectionable practice, and one that ought to be prevented by the special rules?—Yes.

9557. Mr. *Woods.*] You recommend that being done by the special rules, as I understand?—It does not matter whether it is by the special rules or by the general rules, so long as it is made a rule.

9558. Do you recommend a special or a general rule on the subject?—On consideration, it must be a general rule.

9559. If it is to be in the general rules of the Act of Parliament, what distinction do you propose to draw between those colliers, who are small contractors, and any other set of men who are small contractors (say, for instance, railway contractors), because we must remember that these men are no longer paid by wages, but they have become contractors to do the work and to provide part of their own materials. If you propose that the men shall not find their own timber, why do you make such an exception as that in favour of working miners, who are really contractors?—It is a question of safety in the case of mines, and there is no question of safety in a railway cutting.

9560. Did you ever hear of a man being killed in a railway cutting?—Yes, of course.

9561. You propose, in fact, that in a mine there should only be one employer and no sub-contractor?—I do not think so.

9562. What provision would you make for the case then?—I think that the present system is a bad one, but I am not quite prepared to suggest a remedy.

9563. You are not quite prepared to suggest the best mode of remedying it?—No; taking into consideration the fact of the men being sub-contractors.

9564. These men are no longer workmen, working for wages, but they are contractors?—They are actually employers, but of course my remarks referred to a case of this sort. A man takes a stall to work in the long-work system, and he has five or six men working under him or working together, for they are all in the same position. These men have to buy timber at so much per dozen, whatever the price may be.

9565. They provide their own timber for their own safety?—For their own safety out of what they get from the colliery owner, and therefore they do not use so much timber as they would if the timber was given to them by the colliery owner. But I do not know how you would manage it in the case of contractors.

9566. If, in the second place, you propose to put such a regulation as you suggest into the the special rules, then the question arises, why do not you put it into the special rules now under the power of arbitration which you have?—Arbitration is not used in a case of that sort, and I do not think that arbitration would be of the slighest use in such a case.

9567. Why not?—Because the colliery owner would appoint as arbitrator such a man as he knew would agree with his own views in the matter, and one who would give such an award as would nullify the whole proceedings. I think, however, that rules might be so made that the owner of a colliery would have to supply timber to every man.

9568. Do you mean special rules or general rules?—I do not know that it would signify whether they were special or general, but one or the other should be made.

9569. If it is to be a general rule, then your proposal is, is it not, that an Act of Parliament should define that no man shall provide his own timber, or his own materials?—I would scarcely like to go so far as that.

9570. And if it is in the special rules the arbitration would not meet the case, you say?—It would not.

9571. Are you aware of the evidence which has been given by a witness from your district in regard to this question?—Yes, I read it in the "Mining Journal," I think, or in the "Colliery Guardian."

9572. These men who buy the timber and supply it to themselves for their own use and that of their co-partners in their work run a risk, I apprehend, which is caused by a deficient supply which they give to themselves?—No doubt they do.

9573. It comes to that, does it not, that it is timber that they provide for themselves?—Of course they run the same amount of risk as others do.

9574. Is not this the case; six or eight men agree as co-partners to work a stall, and one or other of them buys the timber for the use of that stall, and supplies for the use of the stall, and jointly they run the risk which is caused by any deficiency in the supply of the timber?—No doubt.

9575. Is not that somewhat analogous to a co-operative society, in which all the owners are also workmen supplying their own timber?—Scarcely, I think.

9576. The workmen are the contractors who supply the timber for their own use, taking the cost of the timber out of the contract price paid them for hewing the coal; is not that so?—That is the case.

9577. Mr. *Kinnaird.*] Do not you consider that it certainly is the duty of the proprietor or proprietors of a mine to see that there is sufficient timber put up, and to see that the security of life is provided for?—I think that the colliery owner does see, as a rule, that there is sufficient timber put up for his work, but you cannot make

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him immediately responsible in such a case as I have referred to.

9578. The mode of supply at present, induces the men not to use sufficient timber?—Yes.

9579. And you are of opinion, therefore, that that ought not to be the mode of supply?—Yes; in very many of the mines in my district that is not the mode, but the owners find the timber for the men, and I do not see why it could not be adopted always.

9580. *Chairman.*] You recommend that it should be adopted generally, and enforced by law?—I do.

9581. Mr. *Woods.*] Are not you aware that very many trades are carried on in which the system of contracts is adopted, coal mining being one in your neighbourhood, where the men provided their own materials?—Yes.

9582. Mr. *Greenall.*] I understand you to say this, and nothing more, that where a collier finds the timber for propping he runs greater risk, and accidents occur in consequence of that arrangement, and that if the master supplied the timber, there would be greater care in the propping; is that what you mean?—Yes.

9583. That is the whole of the evidence which you have given on that subject?—Yes.

9584. Mr. *Foster.*] Would you go still further, and relieve the workmen after the timber has been found for him, from any responsibility in the use of the timber for propping the roof?—No, I think I would pay the collier so much for getting the old timber out as a security against his not wasting it; that is commonly done now in Wales; you pay a collier so much for the timber for all he recovers, as a security against its being wasted.

9585. But I am speaking with regard to propping the roof, in the first instance, the timber being found by the owner; you would not wish to put the propping of the roof entirely into other hands than those of the collier himself?—No.

9586. Not of necessity?—No, not the actual fixing; some of the men would have others to prop for them. In the north of England there are a regular class of men whose duty it is to do nothing but set timber.

9587. Mr. *Woods.*] Is it your opinion that the adoption of the provision of the existing Act is working, so as to decrease the number of accidents in mines?—I think so decidedly, bearing in mind the fact of the great increase in the quantity of coal raised. People looking only to the number of persons killed, do not always remember that the quantity of coal worked has trebled, or something like that, in a very short time. Then, of course, there is also the greater depth, and the increased danger arising from that cause, and the extent of the mines also, which renders the ventilation more difficult.

9588. You refer, do you not, to the greater area, which the greater depth of the mine causes the colliery to be?—Yes.

9589. In fact, you mean that a deeper mine must have a larger acreage?—No doubt of it, a deeper mine must have a larger acreage, in consequence of the expense incurred in sinking and opening out.

Thursday, 14th June 1866.

MEMBERS PRESENT:

Mr. Ayrton.	Mr. Kinnaird.
Sir Philip Egerton.	Mr. Liddell.
Mr. Fawcett.	Mr. Neate.
Mr. William Orme Foster.	Mr. Powell.
Mr. Greenall.	Mr. Woods.

CHARLES NEATE, Esq., IN THE CHAIR.

The Reverend HENRY R. SANDFORD, M. A., called in; and Examined.

Rev. *H. R. Sandford*, M.A.

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9590. *Chairman.*] WHAT are you?—An Inspector of Schools in South Staffordshire and North Worcestershire.

9591. Are you Inspector of Church of England schools?—Yes, and of certain schools connected with works; there are some few which I examine which are not specially connected with the Church.

9592. Under what description of inspectorship does that come?—It is simply an accident that in certain cases the colliery proprietors and ironmasters wish their schools to be inspected by the clerical inspector who examines in religion, which, as a rule, the lay inspector does not It is simply schools connected with the works, and a few of them only (about four) that I examine.

9593. That is a voluntary duty which you take upon yourself, I presume?—No, those schools get a Government grant.

9594. Is it a special mode of inspection which is adopted in those districts?—No, my colleague, Mr. Norris, used to examine all the Church schools, *i. e.*, National schools, and a few of the schools supported by ironmasters, and the larger colliery proprietors, which were not Church schools, or Wesleyan schools, or connected with any denomination.

9595. Schools receiving Government grants?—Yes.

9596. How long have you been employed as inspector?—Thirteen years.

9597. In what districts have you been employed?—In South Staffordshire, in Worcestershire, in Shropshire, in the mining districts of North Cheshire, in the North and East Ridings of Yorkshire; I have also seen a little of education in Lancashire, in the West Riding of Yorkshire, in Hampshire, and in Wiltshire.

9598. Confining yourself to the mining districts, what opinion have you formed as to the state of education generally in those districts?—It is much improved; but it still is very low with regard to the mining population, I think.

9599. When did that improvement begin?—I have known it 12 years, and I think it has improved very much, though gradually, since I have been in the district. I think that the prize scheme set on foot by the ironmasters and the coal masters in Staffordshire, much improved it.

9600. What do you mean by "the prize scheme"?—I mean the system by which books and rewards are given to boys who remain at school. The prizes are generally given away publicly, by some leading man of the district; and I think that that has encouraged the education of children to some little extent. That scheme was set on foot by Mr. Tremenheere and Mr. Norris.

9601. You mean that Mr. Tremenheere suggested it, I presume, rather than set it on foot?—Yes.

9602. It was set on foot by the mining proprietors, I suppose?—Yes.

9603. Is that system general through the mining districts?—In the parts I have known, both in Staffordshire and in Shropshire. Mr. Foster, and Mr. Bagnall and Lord Dudley support it in South Staffordshire; Earl Granville, Mr. Heathcote, Mr. Kinnersley in North Staffordshire; and Mr. Anstice and the Coalbrook Dale Company and others in Shropshire.

9604. Have you noticed any improvement in regard to the employment of children since the Act of 1860?—I have noticed this, that the children who are employed are a little bit older in some districts. In one part, Kingswinford, which is near Lord Dudley's and Mr. Foster's mines, I think the children employed are rather older than they were.

9605. But I gather from you that the improvement had decidedly begun before the Act?—Yes; to some extent.

9606. As to the proportion of mining children in schools compared with the children of other classes, what have you to say?—I am sorry to say that I cannot give any accurate statistics; but I only know that, at the last meeting of the teachers and friends of education, where the subject was discussed, the statement was made that it was very small indeed. I wrote to find out what it was exactly, but I can only say that it is very small.

9607. What was this meeting of teachers to which you refer?—It was a meeting at which Lord Lichfield was in the chair; and we were discussing the Report of the Children's Employment Commissioners, and different subjects connected with labour and education came to be noticed; and all the teachers got up one after another, and complained of the small number of miners' children that they had at their schools.

9608. You are aware that the Children's Employment Commission does not extend to mines?—It does not; the subject was only brought in incidentally.

9609. But I understand you to say that the teachers in what they said spoke of the children employed

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employed in collieries as well as of those in other employments?—Yes.

9610. They spoke generally of the mining districts, without distinguishing between the mines under the Act of 1860 and the mines not under that Act?—I think they did.

9611. And your impression was, from what you heard them say, that the proportion of mining children at school was small in comparison with the children in other employments?—Yes; then, too, I judge in this way. If I take a dozen schools in the mining district, I find that the average age of the children is very low, there being, perhaps, not above 17 per cent. over 10 years of age; whereas in the Lancashire districts, where the manufacture of textile fabrics is carried on, perhaps there would be 40 per cent. over 10 years of age.

9612. From what schools did you take this average?—Schools about West Bromwich and Dudley.

9613. How many schools did you take to arrive at that average?—I can only refer to nine of them at this moment. I have them down in this list contained in the Report of the Children's Employment Commission.

9614. Will you tell us the nine schools from which you took that average?—The first was Brierly Hill, where education was in a very low state indeed; there was not one boy over 12 years of age when I was there last, and the population, I should think, is 7,000; Lord Dudley's works are carried on at Brierley Hill: at Capponfield, where Messrs. Bagnall have large pits, there the state of education was better; then at Corngreaves, where the British Iron Company carry on schools and support education to a great extent, the average is much higher than usual, as many as 33 per cent. being over 10 at their schools; then I took two schools at Tipton, where education is very low, and one at Wednesbury, St. James's, which is the poorest part of the town; at West Bromwich, St. Peter's, I found not more than 10 per cent. over 10 years of age, and there are an immense number of children there. At Brockmoor, near Brierley Hill, hardly 14 per cent. are over 10 years old; then there is Wolverhampton, St. Matthew's, though this is more an iron district than a coal district; but taking the rest altogether, I think it makes the average 17 per cent.

9615. In the paper which you have handed in to me, you have put down 154 in the nine schools?—That is the sum total of the per-centages in the nine schools; if you divide that number by nine, it makes about 17 as the average.

9616. Passing from the number of boys who attend school in the mining districts, what have you to say as to the standard of education?—The only way I have of judging of that is through examining them in the night schools; I have about 1,200 lads whom I examine in the night schools in South Staffordshire and North Worcestershire.

9617. The nine schools that you have been speaking of were not night schools?—No; they were day schools.

9618. But the mining boys that you have examined you have examined in the night schools?—Yes.

9619. What sort of observation have you made of those schools?—I examined in 1862 a great many in Bilston, Corngreaves, and Messrs. Bagnall's schools, in two schools at Tipton, one at West Bromwich and one at Walsall.

9620. Did you make any observation as to the numbers of the mining boys in night schools?—There were 79 mining boys in those schools.

9621. Out of about how many boys?—Two hundred boys of all kinds.

9622. Then the proportion of the mining boys in the night schools was a large one?—Yes.

9623. It would be about 40 per cent.?—Yes, we may say that taking the scholars of all classes, about 40 per cent. were mining boys.

9624. You examined those boys?—I examined those boys, and I found that 64 per cent. of them could not read an easy narrative.

9625. What do you call an easy narrative?—Perhaps you do not know the books used in our national schools. The first book is one of monosyllables, and the next book is one containing little stories; this contains the easy narrative to which I refer.

9626. What length of words do you allow for a book containing what you call easy narratives?—Not more than three syllables certainly, such as are to be found in the easier parts of the New Testament. I found that 64 per cent. of them could not read these easy narratives.

9627. To what report are you referring?—I am referring to the evidence given to the Children's Employment Commission, which evidence was given in December 1863. The proportion of boys that could not read their names was 60 per cent. Then I took the numbers again (because I thought I should like to confirm that) in 1864 and 1865, when I wrote a letter on the subject addressed to Lord Lichfield, who is the Lord Lieutenant of our county of Stafford. I only took 38 collier boys in different nights on that occasion. I found then a rather larger proportion able to read, namely, 50 per cent., in certain night-schools near Dudley and Wolverhampton; the schools being Kingswinford, Corngreaves, West Bromwich, St. Peter's, Ettingshall.

9628. By being able to read, you mean able to read an easy narrative?—Yes, the same sort of reading in both cases Out of 11 collier boys, whom I examined at Corngreaves, not more than five could write their names, and not more than four read words of one syllable, or tell the name of the Queen.

9629. What ages were those boys?—Between 17 and 12; I think one boy was 11, and he was employed under the Act as being able to read and write.

9630. Was he sent to school in order to obtain the monthly certificate for being at school?—No, he already had a certificate to say that he could read and write, he was between 10 and 12 years old.

9631. Did you inquire how he got that certificate?—Yes, Mr. Hunt, who is the chief manager of the works and the colleries, sends certificates to his different managers, or rather gives them to the schoolmaster. I find that the British Iron Company are almost the only firm that has supplied many of these certificates, and they seem to have given it up lately; it is the only firm, at least that I have known, to give them; that is to say, I have never found a boy who had the certificate unless he was employed with the British Iron Company. There may be other cases, but I have never come into contact with them. At Ettingshall I found that a great many of the collier boys were very ignorant, and several could not even say the Lord's Prayer; which is a very rare thing.

9632. You mean that that is very rare among children, except mining boys?—They almost all say

say the Lord's Prayer; it is the one thing that they do know.

9633. All but miners' children?—Whether miners' children, mining boys, or whatever they are, they can generally, as far as my experience, say that. Then I thought I should like to get some information from other sources, and I therefore inquired amongst the masters of the workhouses which have a great many colliers in them, and which of course get the worst of the colliers, and they said that the colliers are very ignorant. At West Bromwich, out of some 65 who had been iron boys and coal boys, only 24, the master of the workhouse told me, could read.

9634. In what school was that?—It was a workhouse, and not a school; I wanted to know whether the state of the colliers when they grew up to be men was as bad, as regards education, as that of the boys whom I examined. I saw the masters of the West Bromwich workhouse, and I said, "What do you find with regard to the state of the grown-up pauper colliers as regards education"? and they said, "They are a very ignorant class; out of 65 who have been colliers and iron workers, not more than 24 can read the Bible."

9635. Did he say anything about their age?—These were grown-up men; they were broken-down colliers, in fact.

9636. They were old men, and would hardly be instances of the state of education at present?—No; the master of the workhouse also complained very much of the state of the young women in the colliery districts. "They never seemed to know anything," he said, "of needle-work and household matters." I have known Staffordshire many years, and I have been in coal pits, and I went one day and examined a dozen boys in Corngreaves, at the British Iron Company's works, and I found the boys more ignorant there than in the night schools; I wanted to see whether I met with the best or the worst educated at the night schools, and it struck me that the best class were those who come to the night schools in Staffordshire, and that those who examined into the state of the boys in the pits would find them more ignorant even than I had found them. I took a specimen once in North Staffordshire, at Apedale, and I found that out of half-a-dozen boys not more than half could read; and when I took a specimen in South Staffordshire, at the Timber-tree mine, Corngreaves, out of 12 not more than four or five could read.

9637. Boys in pits you are now speaking of?—Yes.

9638. What were the ages of those boys?—They were boys between 12 and 18.

9639. They were boys, therefore, who might have forgotten what they had known before?—Yes; I found a great difference in one or two of the lads who had been at night schools, but eight of the twelve were very ignorant, and did not know the Queen's name, or the capital of England. They, several of them, told me that there were 12 commandments, and one of them said that the fifth was "Honour father and mother, brothers and sisters."

9640. Did you find any improvement between 1864 and 1866, when you examined them last?—No; the state of things was almost exactly the same, 50 per cent. being unable to read easy narratives. I think it is rather a matter of accident whether it was more in 1863 or 1866; as a fact, it is almost the same still. I took about 30 boys this last winter, and I found just the same proportion, and almost always have found the same proportion of collier boys unable to read. I may say, at the same time, that I often meet most intelligent young men and boys amongst them, very different from the class of boys that I have been alluding to, but I have been speaking of the mass.

9641. Then the result of your evidence generally is, that though there has been for some years gradual improvements in the education of the boys in the mining districts, you have not, from your particular experience, noticed any improvement between 1864 and 1866?—Except in this respect, that in one or two places I think the boys are a little older in the day schools than they used to be before the Act of 1860.

9642. Mr. *Fawcett.*] You have some knowledge of the state of education of the children employed in coal mines on the Continent, have you not?—A very slight experience; I only inquired into that one summer, when I was abroad; it was last summer.

9643. As far as your experience goes, they are very superior to children here, are they not?—I should say they were in Prussia, but I should think they were almost worse, as far as ignorance goes, in Belgium, though I doubt whether they are so rough as our English collier boys; there is no rule in Belgium, as far as I can make out, except that boys are not to go down the pits till they are of the age of 12; but in Prussia they are better educated, no doubt.

9644. Are the children employed in coal mines in a worse state of education than those employed in the factory districts?—Yes; as to the Prussian collier boys, I took some trouble to find out their condition; I tried some of them, and though I am not a very good German scholar, I could make most of them read a little out of a book, the German Testament, or a book of tales; I went to one place called Gielen-kirchen, where the pits are managed by Mr. Robinson, who lives at Düsseldorf. I went into the pit and talked to many of his boys, and found that, as a rule, they could almost all of them read, and the working men, whom I talked to about it, said that all their boys could read; the fact is, that in Prussia all the boys are obliged to attend school up to 14 years of age, and they are not allowed to go down pits till they are 16; that is the last rule that has been made. I do not think they can observe it strictly. When in the mine I met a Durham man, who knew something about South Staffordshire, and he said that the boys were not so bad as our boys in South Staffordshire; I doubt whether they have so much energy for good, probably they have less for evil; the mass of them seem a much more tractable class than the English boys, and to have some little knowledge, as far at least as to be able to read.

9645. Do you think the education in the colliery districts so extremely bad that some further legislation is required?—Yes; I think that some plan to improve it is needed.

9646. Do you attribute the superior education of the Prussian children to the English children to the fact that in Prussia they are not employed till 14?—Partly to that, and partly to the fact that if they run about the streets as they do in England, they are taken by the policeman, and sent to school.

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9647. Mr. *Liddell.*] You have stated that the system of education in Prussia is compulsory, as I understand, up to the age of 14?—Yes; except that if a boy works in a factory, he may go to work at 12, attending school however part of his time up to 14.

9648. Are we to understand you to be in favour of a compulsory system of education in this country up to that age?—I could not say I am; it is rather too strong a measure, perhaps; I do not think that Parliament has recognised any general system of compulsory education (though Members of the Committee know how this is better than I do), which would take children out of the streets, or from their parents' homes and send them to school, and I have not made up my mind that such a system would be desirable.

9649. But the fact of education being compulsory up to so late a period as 14 years of age in a continental country, and not being so compulsory in England, is quite sufficient, is it not, to account for a much more advanced degree of intelligence in the youths in the one country over those in the other?—Yes, it does account for it to a great extent. I should like to quote on that subject the opinion of a gentleman whose name is well known, I mean Mr. George De Bunsen, who is the Liberal Representative of Bonn, and son of the late Chevalier Bunsen. I wrote to him about the state of education in the mining districts in Prussia, and this is what he says in his reply: "As for myself, I cannot personally offer much information on the subject. The principal mining districts of North Germany are, the coal fields of Saarbrücken (belonging to the State); the Regierungsbezirk, or department of Düsseldorf, teeming with industry of all kinds, mining principally; parts of Westphalia, the Harz mountains, Upper Silesia, and the Erzgebrige, in the kingdom of Saxony; elementary education being by law universal and compulsory, there will scarcely be a difference traceable between the schooling of the children in these and any other districts. Factory children are protected by law from overwork. Fortbildungs-Schulen (that is, schools for such as have left school, voluntary of course), are, I expect, more common in manufacturing than in agricultural localities. Looking with the eyes of a traveller merely, I have been struck with the greater liveliness in the former. The complete change produced in the character of the Westphalia people by the growth of industry is astonishing; Bæotians transformed into sons of Hephæstus. In the ancient mining districts (Harz and Erzgebirge), there is much of old fashioned demure gentleness visible in manners and customs, whilst those which have sprung into existence more latterly bear the impress of go-a-headism and petulance; acts of violence and habits of immorality are frequently reported from the latter. It has seemed to me as if some evils which had to be overcome in England by painful experience, evils springing from the masters' liberty to do with their hands as they pleased, using them as necessary evils, as mere substitutes for machinery, have been prevented in parts of Germany, thanks to your experience, by wise regulations and laws, which it may possibly be worth your while to obtain and study. Our present growth of industry dates from 16 years ago; hence the advantage of standing upon the shoulders of your older industry."

9650. That gentleman is very enthusiastic on the subject of education?—I presume he is.

9651. I wish to ask you whether, from your practical experience, supposing a boy to be compelled to attend school up to the age of 14, he could learn anything in regard to the trade that he was going to pursue in after life?—That is a doubt which I long entertained myself. I always thought (in fact I am not sure now that it is not so) that boys ought to begin their work earlier than that. I put the question to one or two gentlemen in Germany who were employers, whether they did not find that boys kept at school so late became too fond of their books, and refused to take to their work. I remember one whom I asked about it said it was not so, but they thought those boys were more steady, and minded their work better than others. It must be remembered, that in Germany everybody is educated, and it does not do therefore for a boy to set himself up and want to be a clerk because he can read and write. If education is universal, as it is there, there is not the same difficulty in getting lads for miners. I have had a talk on the subject with some of our miners, chiefly round about the British Iron Company's works, and they said that if the hours of labour were shorter, and the ventilation of the pits were better, and if they had time to improve themselves, and if education were connected with that work, they did not think that educated men would shrink from the work, or educated boys either, and several of the mining lads who were present said, "We like the work very well."

9652. My question had not reference to people shrinking from the work, but to the actual amount of apprenticeship which a boy should go through to learn a trade, and I want to know whether, if you compel a boy to remain at school two or three years beyond the usual period, he has so much lee-way, as it were, to make up afterwards in learning that apprenticeship; is not that so?—They did not say so in Germany. I should think, judging *a priori*, that they would find that a great difficulty; but I did not so much go into that matter with the coal masters in Germany as I did with the manufacturers.

9653. There would be very great difficulty, would there not, if you instituted any comparison that it would be worth while to make with regard to the skill or the capabilities of a foreign workman, as compared with an English workman, in testing that comparison?—Perhaps there would be; but I do not know enough about the work to judge. The boys there seem to do much the same sort of thing in the pits as they do in England; they look after the horses, and open the doors, and so on. In pit work, except that the boys have sometimes to go into very small places, I do not think that there is much training required, though you no doubt know more of that than I do. The boys have sometimes to go into very low places, and one miner whom I talked to said, "The boys must begin young, or else they will not form to the work"; he meant that they would not be able to go into the places.

9654. Do you know the description of the work which a hewer does?—I have seen it done; but that work is done by a young man.

9655. Do not you think that that would require a considerable amount of skill?—Yes; but I was only speaking about what the boys did.

9656. The boys begin with the subordinate work, and rise to higher branches of labour, I suppose?—Yes; but I find a great difference of opinion prevailing on the question. I had always gone

gone on the supposition that boys must begin that sort of work young, but I have heard a practical man say, "I do not think a boy does any good in a pit before he is 14;" I have, however, heard others say just the reverse. I have no decided opinion about it myself.

9657. Have you ever gone into any calculation as to the effect which might be produced on the supply of labour, if the boys were compelled to remain longer at school?—I have certainly thought of that. If there were further restriction no doubt it would lessen the supply of labour.

9658. And is not the supply of labour a very great difficulty now experienced in mining districts, as is shown by the very high price of wages?—I wish to come to the subject of the hours of labour, as connected with education, presently; but I may say that my idea is strongly that as pits are improved and the hours are shortened it will not be so difficult to get labour. That is what I have heard said several times by miners themselves about it. They think that the reason of the difficulty of getting labour is the fact that the conditions of labour are so bad in many of the pits, and involve so much risk.

9659. You said, did you not, that you found from your own experience that the best class of these boys attended night schools, by which, I suppose, you meant the best educated?—Yes, and the more tractable.

9660. Is it not quite consistent with human nature that a boy who has learnt to appreciate the value of education should wish to improve himself more than others who have not learnt to appreciate the value of education?—Yes, we find that 75 per cent. continue at the night schools, who are of the more educated class; whereas of those who have been neglected, and know nothing, perhaps, not more than 25 per cent. will stay at school for more than a few nights; great big lads who cannot read more than A B C soon get disheartened.

9661. In the case of a young man who is ignorant, it requires a great exercise of self control to begin *de novo*, as it were, with his education?—It does.

9662. And that, I presume, would be found to be the case among all classes, whether miners or not?—Yes.

9663. That feeling, therefore, would not be confined specially to the children employed in mines?—No.

9664. Mr. *Greenall.*] Is there any special tax upon the coal owners in Germany for the maintenance of the schools in which the miners' children are taught?—The fact is, that everybody pays a school rate there; Mr. Robinson's brother told me, "We all pay a school tax" [Classensteuer tax, levied by the gemeiside or commune, for church and educational purposes]; there is no difficulty in supporting schools in this part of Germany, because everybody pays the rate.

9665. No special rate is imposed on coal owners?—Not so far as I could find out; I do not think, that schools connected with works and pits are so common in Germany as they are in South Staffordshire; the common schools in the German towns are far better supplied with assistant teachers than ours are, I am sorry to say.

9666. What are the hours of schooling in Germany?—I think they begin uncommonly early in the morning; perhaps they begin at eight, while we begin at nine; that is a great evil in the mining districts; many have said to me, "We often cannot get the children in our mining district to school till 10 o'clock;" and in some places which I was connected with, they used to go away at half past 11; now it is improved, and they do not go away till 12.

9667. I was speaking of the hours of attendance in Germany?—I should think that school begins an hour earlier there than with us. As a rule, in Germany they are a very much earlier people than we are.

9668. Does any punishment fall on the child who absents himself from school?—Yes; I think so. I talked to one factory inspector on that subject, and he said, "Will you come and see me *strafen die Aeltern?*" I thought this meant a flagellation of the children, but it was only fining the parents.

9669. Do you think that people in this country would submit to that?—I do not know. In Germany there is a public opinion in favour of everybody being educated; and it is very seldom that they think of breaking through that rule. We, too, have the Factory Act, by which parents are fined if they keep their children away from school; and you will find that there is in that district a strong feeling in favour of the Act, in spite of a few being fined.

9670. Mr. *Foster.*] You said, as I understood you, that you thought the parents would more readily employ their children in the mines if the boys had time to improve themselves?—Yes.

9671. Are you not aware that in Staffordshire the colliers and collier boys have a great deal of time on their hands when they are not employed underground?—Well, they have certainly their Mondays, on which they idle about a good deal, no doubt, and I myself see them doing so in some parts; but, on the other hand, on those days when they are at work they seem to be very tired. I know that the young boys very often go to sleep when I examine them in the night schools; and when I talk to the men about it, they always say that if the lads worked eight or nine hours, instead of twelve, then they could come and improve themselves at night.

9672. Bearing in mind the fact that Sunday and Monday are two days out of the seven on which the collier boys have generally a good deal of time on their own hands, do you think that there is a desire amongst them now to avail themselves of that time by going to a Sunday school upon the Sunday, or to a week-day school upon the Monday?—On the Monday they will not. It has seemed to become a sort of fashion that it should be a lounging day, and a holiday. They all take it for granted that it is so, and they prefer to run about all Mondays. I think a great number of them come on Sundays to school.

9673. Do not you think that Sunday is often made, equally with the Monday, a lounging day by the colliery population?—Yes, I suppose to a certain extent it is; at the same time there are a large number of collier boys who do go to Sunday schools. I think that the Sunday schools are badly managed, and are made wearisome to the lads, and that is perhaps the reason that many of them do not go; they are too long and tedious, and they often teach them nothing in the Sunday schools; I think it is because the gentry live out of the districts, and there is no one to teach them but working men, and in many

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cases they learn almost nothing at the Sunday school. I have often asked collier boys whether they go to school, and they generally say "We goes on Sundays." But, on the other hand, I have heard people complaining of collier boys and other boys going about the fields on Sundays and behaving badly.

9674. Is there much desire amongst the parents that their children, after they have entered upon employment, should keep up what they have learnt at school?—I think there is some; I cannot say that it is a very strong desire, or else I suppose it would produce more effect than it does; the boys are often very lawless, however, with regard to obedience to their parents.

9675. Is there any desire among the parents to employ them before the age of 10, or to employ them above the age of 10, contrary to the terms of the Act?—I cannot speak about that; I heard of one case at Pensnett, of a mother bringing her boy to the schoolmaster, and sending him to school, according to the Act, three hours twice a week, for a week or so, but it was speedily dropped off, and the boy disappeared.

9676. Do you think that the parents would look with partiality or with dislike upon any restrictions, as regards the employment of their children?—As far as I can find out, the case is this, that the better class of them are very strongly in favour of education being enforced; I think, if you come to individual parents, and particularly those who are more careless, they do not like being checked at all; but if you bring it before them (as I have done on several occasions), at a meeting, you will find that those who speak, always speak in favour of children being obliged to be kept at school, or almost always. I have heard this opinion expressed at one or two meetings which I have attended at Wolverhampton, Corngreaves, and other places. We had objections urged, certainly, but the general feeling of those who spoke and seemed to influence public opinion amongst that class, was in favour of education. If you brought it home to the mothers (who are more often more unreasonable than fathers on this subject), it would very probably be disliked.

9677. Have you often noticed that there are amongst the colliery population many decent well educated men for their class of life?—Yes; many.

9678. Have those men then had more advantages than other men similarly employed?—No; I do not think they have.

9679. Is there anything then in the peculiar employment of work underground that prevents a man if he is so disposed, from becoming a very decent and orderly member of society?—No; I do not think there is.

9680. Is not there the same difference amongst other and superior classes in their habits and in their desire for improvement and information?—You do not in other classes (if you mean the middle or upper classes) find the same gross ignorance. The fact is, that if you allow any large proportion (say nearly one-half) of a class like colliers to remain in ignorance, they sink into far worse ignorance than those who are not fond of study would, in a higher class, and that results, of course, in immorality and great crimes; crimes, I mean, of brutal violence and drunkenness, which one hears of amongst colliers, and, of course, does not hear of, to the same extent, in the middle class.

9681. To what do you attribute the fact tha there are amongst colliers so many decent lads, and well-conducted men, possessing no peculiar advantages in comparison with others, while so many are the reverse?—One cannot account for it. That is the great argument for the remedies I am going to speak of directly with regard to making education more compulsory amongst that class. It strikes me that there is much force in what I heard said the day before yesterday by a large employer of labour in our neighbourhood, Mr. Samson Lloyd, namely, that the voluntary system as we have it now, just reaches those who want to improve themselves, this respectable class of colliers, for instance, whom you are speaking of; but if we are to reach the class of those who do not seek education of their own accord, and yet want it, perhaps, more than anybody else, we must have more efficient compulsion than we have at present. That is his view, and I must say that it is my own. Respectable people will always try and improve themselves, but one wants to try and reach these rough lads whose parents will not or cannot send them to school. The Legislature must take the place of parents, it strikes me, in regard to such boys.

9682. But though educated as children, unless they desire to keep up what they have learned as children, the Legislature will not be able to do much for them?—No.

9683. Mr. *Powell.*] Have you much knowledge or any knowledge of the more eastern parts of Europe, the salt mines of Bavaria, for example?—I have only once been down one.

9684. Do you know whether the age below which boys are not allowed to go down there is 12 or 14?—No. I did inquire in Austria, but that was not at a salt mine.

9685. Have you any knowledge of the French system?—No. My own notion is that there are no restrictions at all in France. In Sweden there are restrictions.

9686. Do you find that the boys who attend the night schools have lost the small attainments which they gained in their earlier days?—If they have been tolerably grounded, the night school does a great deal to keep it up; but if they have been educated very little, if, say, they left in the third class of the National School, then they seem to have forgotten an immense deal, in fact almost everything, whether they are mining boys or iron-works boys.

9687. You probably find many boys attending the night school who have in fact lost almost the whole of their education which they had gained in earlier life?—Yes.

9688. Do you find that their having acquired the elements of education in their earlier days, renders it easier for them to attend with advantage at the night schools?—Yes, it is better to have learned a little, to have left, for instance, in the third or fourth class of a National School, than to have never been to school at all. Those who do well in a night school, are generally those who have left in the first or second class of the National School.

9689. Does your knowledge of night schools give you any impression as to the permanence of the education given in ordinary day schools?—Yes, it has just given me this impression, that with regard to about a third who stop till they get into the first class, the education has a very great effect, and does a great deal of good; but then with regard to those who leave in the third

or

or fourth class (who would form perhaps another third), I should think that very little good is done, though at the same time some little is done, better than nothing. There is perhaps another third composed of those who never go to any school at all, or only for a year or so. With regard to them, I should say that they get very little good by attending night schools. Every now and then there is an exception, in the case of a young man of remarkable perseverance, who has never learnt anything as a boy, and yet at the night schools will get on well.

9690. Are you aware that in Germany in case of the parents not sending their children to school, imprisonment has been resorted to?—I am not aware of that.

9691. Mr. *Liddell.*] You have said that crimes of drunkenness and brutal violence are observable among the colliers. I wish to ask you whether your attention has been called to the evidence given by a witness before this Committee, of the condition of the South Yorkshire colliers?—No.

9692. Then, perhaps, you will allow me to read it to you, and to ask you a question upon it. They are described to be most respectable men; their habits are very provident; they have built a great number of houses at their own expense, which they let at high rents, many of them owning three or four houses apiece; their houses are very well furnished, and in a most comfortable manner, for the most part; their daughters not unfrequently learn the pianoforte, and their sons learn other musical instruments, and many of them garden. Now, I wish to know whether you think that crime and drunkenness and brutal violence would be commonly found among a population answering to that description?—No; I only said that amongst a certain proportion who grow up in ignorance, it would be so.

9693. But would you wish those words to go forth describing the class, without some qualification?—No, certainly not. I said that a certain proportion grow up in ignorance. I should like to qualify it so far, as to say, that even of the ignorant colliers, many are incapable of anything like that. Still I do say, that from the prevalence of ignorance, a large portion of the colliers do grow up in such a state that they are very apt to break out into these crimes which we all read of in the newspapers.

9694. Have you ever observed whether these offences are perpetrated by what I may call the fluctuating population, rather than by the settled population in the districts with which you are acquainted?—I knew of one case in Coseley, the most horrible murder I ever heard of. A man took his illegitimate child of eight years of age, a beautiful little child, and cut its throat; and he, if I am not mistaken, had long been a resident there.

9695. Do you think that these acts of violence are more prevalent amongst the colliers than amongst brickmakers or masons, quarrymen, or other trades with which you are acquainted?—I think they are more prevalent amongst colliers than they are amongst the factory people; I mean the people of textile factories; I do not know that crime is more common amongst colliers than it is amongst iron-workers, and people of that class.

9696. Mr. *Fawcett.*] Speaking generally, it is not the nature of the employment so much as the state of education of the people who are employed in it that produce these crimes?—I quite agree with that; I certainly should put colliers above brickmakers.

9697. If there were the same proportion of ignorance amongst brickmakers as colliers, you would conclude generally that there would be the same amount of crimes and acts of violence amongst them as amongst the other class?—Yes, and I think that brickmakers are more ignorant than colliers.

9698. Is it the ignorance that produces the crimes?—I think mainly that.

9699. Children employed in coal mines up to 14 years of age, are employed not in any skilled work, are they, generally?—As far as I could see, they are not; they are employed chiefly in driving horses, opening doors and so on.

9700. Therefore there is no reason why a youth beginning work at the age of 14, should not just as well learn a skilled work in a colliery, as a child beginning at the age of 12?—I do not see any reason why he should not, so far as my knowledge goes.

9701. *Chairman.*] You are of opinion, I believe, that there is a want of some regulations to enforce the attendance of the boys at school. What regulations would you suggest?—The Act, as it now stands, does not, I think, effect the object which those who brought it forward hoped it would, because the coal proprietors round us simply dispensed with the boys under 12 years of age, so that they are not brought under education; that is to say, the class of boys whose parents neglect them are not brought under education.

9702. That only applies to a certain class?—Yes.

9703. You do not mean to say that the regulations within your knowledge as to boys under 12 years old are neglected?—No, not so far as I know.

9704. But you would wish to have an Act which would apply to boys after 12 years of age?—Yes, and which would do more to ensure boys of all ages being educated, for a great many of their parents leave them to run about the streets: if some provision, like the Factory Act, were extended to mining boys, more of them would be brought under education; when the extension of the Factory Act was discussed in the Potteries district, in North Staffordshire, I made some inquiries to see which Act did most for education, the Factory Act or the Mining Act.

9705. Before you go into that subject will you state to the Committee what are the educational provisions of the Factory Act?—The provisions of the Factory Act are, that no child shall be allowed to work till he is eight years of age; and between the ages of 8 and 13, children must go to school three hours a day; a child working alternate days must attend school five hours on the day when it does not work; between the ages of 8 and 13, children only work 6½ hours a day, or they may work 10 hours on alternate days; that Act has been extended to the Potteries as well as to the cotton and woollen districts.

9706. After the age of 13, what are the regulations of that Act?—There is no regulation about education then, but simply about the hours of labour.

9707. Nothing about attendance at school after the age of 13?—No.

9708. You say that you had to consider sometime ago the relative merits of the regulations of the Mining Acts and the Factory Acts in their application to the Potteries?—Yes.

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9709. Will you tell us in what way you were called upon to do that?—I brought the matter often before the manufacturers of the Potteries, and pointed out to them how education was injured there by the system of child labour; Mr. Adderley, the Member for North Staffordshire, presided at a meeting on the subject, and I think he recommended some provision like the Factory Act as the best thing for the Potteries, but several of the manufacturers present seemed to think that some provision like the Mines Inspection Act, that is to say, some regulation like the Educational clauses of the Mines Inspection Act, was the best thing for the children of that district; so I agreed that I would try and find out from those who had practical experience of the matter, which Act was the best, the Colliery Act or the Factory Act.

9710. You mean the best for education?—Yes, I will quote the evidence which I received on each side. I asked Mr. Akroyd, who is Member for Halifax, and who has often urged strongly the advantages of the system of half-time education in the textile districts, to give me his opinion, and he told me this: "Both girls and boys, half-timers, work more cheerfully, intelligently, and usefully from the limitation of working hours, and from improved education." I also wanted to know whether they were improved in behaviour, in disposition towards their employers, and in morals, and he stated that they were.

9711. Mr. *Powell.*] What book is this which you are now reading from?—I am reading from a pamphlet on the subject.

9712. Of your own composition?—Yes.

9713. *Chairman.*] I understand you to say that you were appointed by the manufacturers in the Potteries to make these inquiries?—I offered to find out for them which was the best plan.

9714. And in your inquiries you consulted Mr. Akroyd?—I consulted Mr. Akroyd, and he spoke very highly of the working of the Factory Act in regard to the half-time children brought under his notice. Then I consulted Mr. Walker, a magistrate and also a manufacturer, who has large mills and factory schools near Bradford, and he approved of the half-time system. I also consulted Mr. Crook, late M.P. for Bolton, who brought in an Act for extending the provisions of the Factory Act to bleaching works, he being himself an owner of bleaching works, and he was in favour of the half-time system.

9715. As to the operation of the Mining Act, whom did you consult?—I asked the Inspector of Mines in North Staffordshire, Mr. Wynne, his opinion. Then I consulted also Mr. Baker, the Inspector of Mines in South Staffordshire, and I also consulted the manager of Lady Londonderry's collieries in Durham, and the general result of my inquiries amongst them was that they thought that the Mines Act did some little good, inasmuch as it prevented the children from being worked quite so young as formerly, but that it did not actually bring many children to school according to the clauses of the Act.

9716–17. What was the advice which you ultimately gave on the question which had been submitted to you?—I recommended them strongly to favour the adoption of the half-time Factory Act; there was a great deal of discussion about it at first, but the Government Commission which was appointed to examine into the matter, came to the same conclusion, and the result was the adoption of the principle of the Factory Act by a Bill which Mr. Austin Bruce, then in the Home Office, brought in, I think in 1864, for the extension of the Factory Act.

9718. That is to say, for the extension of the Factory Act to the Potteries?—Yes, and it seems to have worked very well there, for it has brought under education 1,300 children who had never been brought under education before; and last year, when I went with Lord Lichfield to visit some of the schools in Staffordshire, we found, as the result of our inquiries, that it had worked well.

9719. When was this new system applied to the Potteries?—In 1864, and it was 1865 when Lord Lichfield and I went there.

9720. The adoption of the system has already produced a considerable effect, as I understand you, in the Potteries?—Yes, it brought children of these early ages under education who were formerly working all day.

9721. Then the result of that system will be that the children in the Pottery districts will be better educated than the children in the mining districts, I presume?—Yes.

9722. Do you think that they will be much better educated than the mining children?—Yes, I think they will; certainly, as far as things go now.

9723. Mr. *Fawcett.*] With regard to the application of some Act like the Factory Act to collieries, do you yourself see, or have you heard of any practical difficulties which do not apply to its application to the Potteries?—Yes, I see certainly some special difficulties in the case of collieries.

9724. What are they?—For instance, there is the difficulty caused by the distance that the boys are from the mines often; Mr. Heathcote, who is a large colliery proprietor in North Staffordshire, has discussed the subject with me, and he says: "The boys in a pit are often working at a distance from home; how could you send them to school in the afternoon if they worked in the morning?" The answer which I made to that was, that they might work on alternate days.

9725. Is there any general or necessary reason why the children employed at a mine should live further away from the mine than the Pottery children from their occupation?—I suppose there is; for one thing, the mines are scattered in many instances all round the country; but at the same time, I think that that would not always be the case; a great many of the children live within a convenient distance of the mines.

9726. Do you think that the practical difficulties in the way of adopting the Factory Act for collieries, would be overcome by employing children on alternate days?—Yes, I think that if this plan were adopted for collieries, the day's work in that case should not be more than nine hours, or else it would be no improvement.

9727. According to your experience, are the good results arising from the Factory Acts diminished very much if children are employed on alternate days instead of each day half-time?—I have hardly seen any case of that kind in the textile districts; I have never seen any advantage taken of that concession in the Act there. In the case of the Potteries I asked Mr. Baker, the Inspector, about it, and he said that in a very few cases the manufacturers availed themselves of

of it; in some places there they do not employ the boys in the afternoon, and in other places they have relays of boys.

9728. The wonderful results of the application of the Act in the textile districts, are quite notorious, are they not?—Yes, everybody agrees to the advantage of it there, and the parents I have talked to are in favour of it, and the children and employers.

9729. Do you think it has met with universal approbation?—I should not think in the Potteries it has yet. The smaller manufacturers dislike these restrictions the most; in one place, Longton, where there are a great number of small manufacturers, the greatest opposition was raised to the bringing in of the Act.

9730. You have had a great deal of experience of the state of education both in the textile districts and also in the collieries, and you say, as I understand you, that the state of education is very much superior in the textile districts to the state of education in the collieries?—Yes. I must say that north-country people (though I would rather have to deal, I think, with midland counties people), are generally more self-reliant and more anxious about education than those that I have to do with in the midland counties. When one talks of the high state of education in Lancashire and in Yorkshire, I think that one should always remember that there is a great natural difference between the people there, and those in the midland counties.

9731. But that natural difference is not shown in the state of education of the colliers in Lancashire and Staffordshire, is it?—I fancy so, to some extent. I believe that there is rather a higher standard in Durham, certainly, and I should think in Lancashire.

9732. Do you know it of your own knowledge?—I cannot say I do. At the same time, though the character of the people makes some difference, I think that the higher state of intelligence depends more on the occupation of the young, and the fact whether they have an Act providing for their being satisfactorily educated.

9733. Would the colliery proprietors and the working miners welcome the application of some measures similar to those contained in the Factory Act?—I do not know about the proprietors. I have spoken to several of them on the subject, and many of them have urged objections. A great many of those employers whom I have spoken to are very liberal supporters of education, but, at the same time, they think that the Act would be troublesome. Of course my own feeling is, that for the owners or their agents to take a little trouble of that sort, would result in a great deal more improvement than is the result of the large sums of money spent by the coal-owners in education, because I see so many of the mining children who stop their education when very young, and so are hardly at all benefitted; and I think that if the coal-masters would be at the trouble of enforcing an Act of that sort, far more good would be done than by their present support to education, liberal as it often is.

9734. Have the coal proprietors pointed out to you that any peculiar annoyance would arise to them that would not arise to textile manufactures from the operation of this Act?—Yes. They have told me, for instance, about the distance that the boys live from the pits, and also of the difficulty of bringing up boys in the middle of the day from the pits; and another thing they say is, that there would be fewer boys in each pit than in each factory, so that it would be more troublesome to enforce the Act.

9735. Your opinion is, that the inconveniences would be overcome to a great extent by adopting the alternate day system?—Yes. I should, however, say that I do not think colliery proprietors would be in favour of taking boys as young as eight years old. Half-time between 10 and 13 should be the regulation with regard to colliery boys, if an Act were ever adopted for them. I wish to say, however, that I think that even with that provision education would not reach a great many cases. I cannot help thinking that for lads under 16, say lads between 13 and 16 years of age, three hours a-week attendance at the night school might be enforced. In favour of that view, it may be mentioned that the Children's Employment Commissioners have recommended that boys up to the age of 16 engaged in the glass works should attend school two or three hours a-week. Is may seem to be carrying interference rather further than it has been carried hitherto; but, at the same time, one must remember that in foreign countries there is still more. In Switzerland, for example, which is a very free country in many of the cantons, the boys are obliged, not only to attend school to be taught reading and writing, but to come to the pastor of the district to be taught religion up to the age of 16. If you interfere with these things at all, and make a law with regard to them, it always seems to me that the Legislature has a certain right to make them obey the law, and to put them under the law. The difficulty, of course, would be with regard to night schools, that boys from collieries would be more tired than those employed in the Staffordshire Potteries.

9736. After what you have said about night schools, I presume that you would advocate some limitation of the number of hours for which a lad between the ages of 13 and 16 might be employed?—I certainly do not think that the regulation which I have suggested with regard to education could be carried out, if the lads were worked more than nine hours a-day.

9737. Between what ages do you mean?—Between the ages of 13 and 16. The suggestion of the miners made at one of their meetings was that no boy should be employed at all till he was 12 years old, and that he should then produce a certificate showing that he was educated and physically competent for work, and that up to 14 he should attend school three hours a-day during three days a-week, and be instructed in the elements of chemistry and geology, and so on. But it seems to me that eight hours work and instruction afterwards for boys up to the age of 14 would be perhaps more troublesome than the other plan, and it would probably affect the adults as well as young people. While eight hours work would be rather too long, probably, for a little boy between the ages of 11 and 13, one would fancy that it would be rather short for an adult.

9738. That suggestion to which you have referred was made by working men, I understand you?—That suggestion was made by working men at one of their meetings at Leeds. They were very unanimous in saying that the boys should only work eight hours and go to school three hours a-day. That would be an awkward arrangement

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arrangement now, because those schools generally close at three or four o'clock; they could go to night schools after that time, of course.

9739. Mr. *Liddell.*] The half-time system, I believe, is only applied to in-door labour; do you know any class of out-door labourers who are subject to the law in that respect?—Yesterday I was inspecting a school, and a little boy was brought to me as a half-timer who was working at some fire-clay works. I do not know whether it was that he had been driven to the school by the inspector, or whether the law applies to brick-makers.

9740. Can you state whether, from anything you know, the Act for the half-time system has been applied to any but in-door labour?—I should say not.

9741. You have advocated the alternate day system, rather than the half-time system, but if either the half-time system, or the alternate day system, was extended to one class of out-door labourers, would it not be only fair that the system should extend to all out-door labourers?—I should venture to suggest that all the legislation on these subjects has been grounded on the fact of the difference in the physique of the youth. Now there is the greatest difference between the young mining boys, and those who are engaged in other works—agriculture, for instance; you can tell them in a moment by their pale looks.

9742. One class work in the light, and the other in the dark?—Boys in mines are not the same, physically; they cannot get the same amount of oxygen in their blood; they cannot be so strong and vigorous as others.

9743. Have you ever compared a ploughman with a pitman in colour?—Yes.

9744. Is not the pitman always pale, and the ploughman ruddy?—Yes; that is because the ploughman has the oxygen in his blood, and the other has not. Of course, it depends very much upon the district, and some pits are more healthy than others.

9745. Are you prepared to say, as a rule, that a ploughman is a healthier man than a pitman?—I should say certainly.

9746. That requires medical statistics to prove it, I presume?—Yes; of course.

9747. Going back to my previous question, if you once extend the legislative system of which we have been speaking, of compulsory school attendance to one class of out-door labourers, do you think that you could in common justice refrain from doing so to all?—I think you could; when this subject of a general Act of compulsory education was brought forward by Mr. Adderley, a few years ago, Sir George Cornwall Lewis, the Home Secretary, opposed it on this ground. He said something to this effect: "I approve of an Act enforcing schooling upon mining boys to a certain extent, but I do not think I should be in favour of a general measure. When there is any particular class in this country low in education, and low physically, then I think the Legislature has a right to interfere in their case." I myself believe there are evils, both with regard to the physical condition of miners and with regard to their educational state, which require these special provisions which are not required for the general agricultural labourers, though possibly they may extend to them in time.

9748. But if you do not extend education to all the working classes, supposing you to affect one class, does not this result necessarily occur, that the classes not affected by legislation have a practical advantage over the other class which is?—I do not see how agriculture would get any advantage over mining. I often hear people say that you may count the number of shillings a-week which a boy may get in a mine by his years. A boy of 13 years of age may get his 13 *s.* a-week in a mine, while a boy in agricultural labour would get but 4 *s.* a-week. There is no danger, I think, therefore, of agriculture ever carrying off the labour that now goes to mining. I should think that there was danger of the hardware trades taking boys employed in pits, and I think that a reason for extending the legislation to the hardware manufactures.

9749. If you have one class of out-door labourers' children compelled to attend school, and another class not, will not the parents withdraw their children from the one employment, in order to put them into the other?—I asked a coal-master in North Staffordshire that question, and he said, "Though we are nearer the rural districts than most collieries, we are not afraid of any competition of that sort from them."

9750. Will not the employers in the one instance have a much greater facility in obtaining labour than those in the other under these partial regulations?—These regulations would extend, I should hope, to all kinds of manufacture which are likely to compete with coal masters, and I really do not think the green fields are near enough to carry off the boys; I wish they were.

9751. Then I do not understand you to advocate anything like a half-time system for the agricultural classes?—I hope to see the day when it will be extended, but I think that day is very far distant; and I think that there is a case for applying it to mining that there is not for applying it to agriculture.

9752. Mr. *Greenall.*] I understand you to express an opinion that boys under 16 years of age should not work more than nine hours a-day?—Not if the boy has to go to a night school afterwards.

9753. You would not employ a boy under 16 years of age more than nine hours, if he has to attend school afterwards?—No, I would not.

9754. Can you tell me the length of the hours of the boys in the pit of which you have been speaking?—I should say that they go down at six o'clock in the morning, and come up about six in the evening. I do not suppose that they work more than 10 or 11 hours, but I think they are down about 12 hours.

9755. Do you know the proportion of boys to men in the collieries?—No, I do not. In the pit to which I went there were not above 12 lads that I saw, and I should think 60 or 70 men.

9756. If young boys worked on alternate days, as you suggest, do you know whether sufficient boys could be found for that system of relays?—That is the great difficulty which is always urged.

9757. You do not know the number of boys employed, I understand you?—I do not know the number, but I wish to mention a fact about the working of the Factory Act, and that is this, that a far smaller proportion of children under 13 years of age are now employed in the textile districts since the half-time system has been introduced, than were employed before the passing of that Act, simply because the manufacturers

now often will not take the trouble to employ them while they are subject to these restrictions.

9758. Mr. *Forster.*] You have got, I think, a little wide of the line which we have been confining our attention to, because you have introduced now a question which has been dealt with very largely by the Children's Employment Commission; in your answer to Mr. Fawcett you have limited the subject to a comparison between the mining children and children employed in the textile districts, but it would also embrace a very large number of children employed in other occupations connected with the iron-works in the district to which you have alluded, would it not?—Yes.

9759. Therefore you were not intending, I suppose, that the Committee should understand that these limitations were to be applicable exclusively to colliery children?—No, certainly not; but, at the same time, I thought that the Committee were only considering the colliery children; I think that these limitations are wanted, perhaps, more for other classes, the hardware children; as far as I can see, the nailing, and little household manufacture which is carried on in South Staffordshire, does far more injury to education than the colliery work; I have no doubt of that.

9760. You spoke of colliery labour as being rather exceptionally prejudicial to children, and I gathered that you would make an exception with respect to the collieries which you would not extend to other branches?—Agriculture is the only other employment to which I would not extend it.

9761. Mr. *Liddell.*] But you are aware that my questions had reference not only to agriculture, but to the vast amount of out-door occupation other than that in collieries?—Yes.

9762. Mr. *Forster.*] What would you recommend with respect to the boys employed in mines?—I think that between the ages of 10 and 13 they should either go to school for half-days or on alternate days; and, between the ages of 13 and 16, I should like to see a rule introduced (though I am not very sanguine about it) that they should attend night schools for three hours a-week, supposing that they do not work more than nine hours a-day; that is what I think is wanted, and it would be a great advantage if it could be carried out.

9763. Do you think that the parents of these boys would be in a position to forego the earnings of the boys after they attained the age of 12 years, and till they attained the age of 16, which they would sacrifice by this reduced time; are the circumstances of the parents, in fact, such, that they would be able to forego the reduction of the earnings which would be involved?—I ground the suggestion which I have made on the fact, that all the miners to whom I have spoken on the subject want to see their own hours reduced to eight or nine hours, and I believe that sometime it will come to pass that nine hours labour will be the usual thing in a pit.

9764. Are you aware that, during slack trade, the pits in the district in which you reside frequently do not work more than four days a-week?—That is probably so.

9765. Are you aware that at the present moment many of these pits are not getting more than four days a-week?—I was not aware of it.

9766. Are you aware, further, that very often the colliers do not get more than three days a-week of work in the summer?—I believe they do not, and that seems to me just the result of the long-work system. They glut the market with coal, and then they are out of work for a time; if they worked short hours every day I think they might have more steady work, though I am now speaking perhaps of matters which are out of my province.

9767. You are aware, I presume, that the coal market varies according to the season of the year, and that in the summer time the pits are obliged to slacken their work in proportion?—Yes.

9768. In the slack time, when the colliers were working four days a-week, how would you meet the case of the boys; I presume your system of alternate days would give them then only two days a-week?—Yes, boys under 13 years of age.

9769. Are the circumstances of the parents of these children such, that they would be able to support their children from the earnings of two days labour a-week?—I do not see why they should not; I know that poor peasants in Germany, who get nothing like what the peasants of mining boys here get, manage to keep their children at school till they are 14 years of age, scarcely letting them work at all, and they are much worse off than our colliers; and I find in Yorkshire that the agricultural labourers all send their children to school, and the miners are better off than they are.

9770. Would an English pitman be satisfied with the diet of the Germans, do you think?—Perhaps not; but still there is an immense difference in the wages; if a boy at the age of 14 in England gets his 11*s.* a-week, what a wonderful contrast that affords with the wages which a German boy of that age gets, or an English agricultural boy.

9771. Are you quite right in the figure which you mentioned as regards the earnings of a boy of 14 in the collieries?—It may be rather too high a figure which I have mentioned; you know far better than I do; I have heard people mention that amount, I think; the boys are well paid, no doubt.

9772. Mr. Dickinson, a mine inspector, was asked: "Assuming that boys are to be allowed to go into the mines at the present age, do you think that any restriction should be put on their hours of labour"? and his answer was, "No, I would put no further restrictions upon them than there are now; if there were no such thing as poverty, you might put further restrictions, but these working people have their living to make in the world, and perhaps no class of workmen are more exposed to accidents than colliers; and if the father should be killed, the mother must get her boys employed as soon as she can." Now in this theory of yours, with regard to the half-time employment up to 13, and limited employment up to 16, have you considered the question relative to the circumstances of the parents of these children?—Yes; I remember hearing that, in the factory districts, where the children are not allowed to work more than half-time, sometimes, even with that restriction, a lazy parent would live on the earnings of his children; that shows that it does not ruin them; then, too, the wages have increased in the textile districts since the passing of the Factory Act.

9773. Do the children in the factories usually get their six days work a-week?—I must allow

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that I should think they do more regularly than the colliery boys.

9774. Do not you think that the uncertainty of the employment is a very important element in this question as it relates to the colliery boys?—Yes; some weight must be given to it, I admit.

9775. The factory system is what we may almost term a clockwork system, is it not?—Very much more regular than the other, no doubt.

9776. It is dependent upon extensive machinery being kept in motion?—Yes.

9777. And a totally different thing, therefore, from the very uncertain employment which miners generally obtain?—Of course; yet even in the cotton and woollen trades there are fluctuations, as we have all seen lately; and I remember that being urged very strongly when we discussed the Act for applying half-time restrictions to the Potteries. The manufacturers said, "Our trade is very uncertain, and not a regular trade like the cotton textile work." As I say, that objection was urged then, and I think the Potteries are something between the colliery districts and the factories with regard to regularity of work. Still, if the half-time restriction does not injure the trade in the Potteries, as I do not hear that it does, I do not see why it should in the mining districts.

9778. Whatever the difficulties with respect to the colliery boys may be, more or less, I suppose you would agree that they would be greater than would occur in the application of the Act to iron-works and factories, where the employment may be considered to be so much more regular?—Yes.

9779. Would you wish the collieries to precede any other large employment in this respect; would you, in fact, wish to take the collieries as a particular mode of employment for an experiment?—No; I think that the Potteries afford just exactly the work in which I should like to have seen it tried with children, because they are something between factories and mines as regards regularity of work.

9780. Taking the Staffordshire coal field, for example, would you have the collieries made the field for the introduction of your system as an experiment?—I do not think it should be tried there first.

9781. Would it not be almost the last kind of employment where such a system should be attempted to be introduced?—I do not know. I always think that those large iron-works, where they have night work, present the greatest difficulty with regard to half-time education. Next to them would come the collieries. There are peculiar difficulties with reference to the collieries, but I think not so great as those with reference to the iron-works.

9782. Would you go so far as to say that you would recommend it to be tried in the collieries where it is not applicable to the other large employments of the district?—Yes; I should say that even then it would be a good thing for the collieries, though it would not do so well, of course.

9783. Do not you think that if the system were applied to collieries, the boys would be altogether drawn off into other trades and employments?—From what I have seen, I think the more education is given to the lads in any employment, the better the class of people that would go into it.

9784. Have not you already stated, that education has discouraged the labour in the textile districts; that the employers found that there was so much difficulty in obtaining these certificates, that the number of boys under 13 years of age employed by them has decreased?—I do not say that the actual number has decreased; the number itself has increased perhaps, but the proportion of children to adult workers has decreased. With regard to the objection that half-time restrictions would drive boys from mining to other trades, I would remind the Committee that the Government has promised a Bill for the extension of the Factory Act to many of these hardware trades. That objection will not tell then. I suppose they will introduce that Bill before anything is done in regard to the collieries.

9785. Mr. *Woods.*] I think you gave it as your experience, that the proportionate number of children employed had decreased in consequence of the restrictions imposed in the textile district?—Yes; the proportion has decreased.

9786. Where are those children now?—I hope they are at school; I should fancy so from the progress which has been made in education in those districts.

9787. Have you any statistics to lay before the Committee to prove the fact of their being at school?—I cannot say that I have any statistics, but I have a very strong impression, judging from what I have heard from my colleagues, and from the strides which I know that education has made in Lancashire and the West Riding of Yorkshire, that these children are at school. When I was at Halifax I scarcely ever saw a child running idle about the streets. Those children, therefore, I presume, must be at school, unless they are swallowed up by other occupations.

9788. You have given the Committee your opinion that the system of relays would not be practicable; you are aware, perhaps, of the fact which has been given in evidence before this Committee, that the boys employed in collieries are generally the sons or relatives of the colliers?—Yes, very often.

9789. Did I rightly understand you to go the length of saying that you would recommend that the principles of recent legislation on the subject should be applied to boys engaged in all trades?—Wherever there is anything which tells on the health, any exhausting labour or confinement, I think that should be done.

9790. Those are two different subjects, I apprehend, (though I observed just now that you treated them together), the education and the physical condition of the boys, are they not?—Yes, they are different, but I cannot separate them, because I am not prepared to advocate extending these educational clauses, except where they are combined with shortened hours for the sake of the physique of the young people.

9791. Do you think it practicable to introduce the system of relays in collieries?—I do not see why it should not be. They said in the Potteries that it could not be done, and yet they do it now in some cases there.

9792. Are you aware that it has been given in evidence before this Committee, that the boys have to remain down in the pits later in the afternoon than the men, in order to finish their work?—I have not heard that put, but it is just what

what I should have expected, because it is just what was stated in the Potteries, that the boys stayed to finish their work.

9793. You do not state that it is not so?—No.

9794. You have stated that idle parents live on the children's wages in the factories, and therefore their wages were good and sufficient; was not that your inference?—There have been cases which I have known of such a thing; I had a case mentioned to me the last time I was at Sowerby, near Halifax.

9795. You are aware that women and girls work in the factories?—Yes.

9796. And probably you are aware that the proportion of women about mines is infinitesimally small, as compared with the number of boys and men employed in them?—Yes.

9797. Then that would tend to limit the force of your answer upon that subject; when you speak of some idle parents living on their children's wages in cotton factories, probably girls being employed in and around mines only to an infinitesimal extent, there is not the same likelihood of idle parents living on the wages of their boys?—No, I do not think there is. At the same time it is quite possible that a parent may have some of his girls in Japan factories and nail shops, which abound in the South Staffordshire district.

9798. I understand you to wish for a legislative provision as to education, which shall include both points, the physical and the moral provision?—Yes, my old chief, Mr. Morris, who once advocated a measure for making employment in all kinds of work conditional on education, came to that conclusion at last. "I do not think," he said, "that you ever can make schooling compulsory, unless it is done in conjunction with some measure for the protection of health."

9799. Are you yourself conversant with the physical difficulties and the danger that boys and men, going to and from their work in the mines, undergo?—Yes, I have heard a great deal about that.

9800. Have you ever been down a mine?—Yes, several times both in England and in Germany.

9801. Do you think that it would be safe to send boys down alone?—I do not know that it would; I know clergymen who have been down alone, but I do not know whether with young boys it would do to send them down alone. I dare say, they would not be afraid, but they would be up to all sorts of games and tricks.

9802. I understand from your answer that you think it would be very dangerous for boys to go down alone, when you contrast clergymen with boys?—I mentioned clergymen, because they are persons who are not practical colliers.

9803. Are you aware that one of the difficulties urged by colliers, in the way of having a system of relays of boys, is the difficulty of sending boys up and down alone?—I have not heard that; that would be obviated of course by the plan of alternate days.

9804. I understood you to say just now, that you are decidedly in favour of extending compulsory attendance at school to boys in all trades in England with one exception; did I rightly understand you?—I would extend it to all trades where their health can be in any way affected.

9805. I think you made an exception?—I excepted agriculture.

9806. *Chairman.*] Upon what information did you say that you believed that in some places in the potteries, they have left off employing boys in the afternoon?—Mr. Wedgwood, who was one of the great advocates for extending the system of protective legislation to the children employed in his manufacture, wrote to me about it, after it had been introduced; he said, "All our men do without boys in the afternoon;" but he added a postscript to his letter, in which he said, "I find that some of our men do employ two sets of boys; they have relays."

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9807. Mr. *Woods.*] Is it to meet that difficulty that you propose to include all the fish in the same net, excepting those who belong to the green fields?—No, it is simply that I want to see them all educated. I have not looked upon it at all from a manufacturer's point of view, as a means of preventing one trade having an advantage over another.

9808. I suppose you are aware that there is great difficulty in recruiting the number employed (if I may use such a term), in a mine already?—I have often heard this said.

9809. Is it within your knowledge, that persons who are not themselves either nearly related to colliers, or connected with collieries, and who have children, object to send their children down into a mine already?—I think they do. I was speaking to a very intelligent pit manager of Mr. Whitehouse's, West Bromwich, the other day, who, by the bye, had not received any education. He said, "I shall never send my boy down a pit." Potters used to say exactly the same in reference to sending their children to the potteries, but I believe that by shortening the hours of labour, and improving the system of education, you would cause that prejudice to decrease. The collier boys, themselves, seem to like being in the pits; little fellows very often before they go to work in the pits have rather a horror of it, but when a boy has once grown accustomed to it, I think he likes it.

9810. Mr. *Fawcett.*] You think that improving education will rather tend to increase than to diminish the supply of labour, as I understand you?—I think it would do so, if the hours were a little shorter also.

9811. Mr. *Woods.*] Will you be kind enough to tell me how you think education would improve the desire on the part of men to go into a coal mine?—I simply say this; that if mining work is looked upon as an employment, where there are moderate hours, and where education is combined with the work (as it would be under the plan which I have suggested), then I think the parents would be more favourably inclined to it than they are now. In the half-time districts I have seen the most respectable boys, the sons of tradesmen, coming as half-time scholars from the mills.

9812. How do you think that connecting education with the work would tend to make the mothers who fear for the limbs and lives of their children, more desirous for their going into a mine?—Now perhaps they say to themselves, "If our boys are colliers, they will grow up to be rough fellows;" if it came to be recognized that a colliery boy was tolerably cultivated and civilised, it would make the employment appear more desirable to them.

9813. Is it within your knowledge that the fear of accidents tends to prevent persons not connected with colliers by kinship or acquaint-

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ance from sending children into mines?—I remember one parent, a collier, at Pensnett, telling me of his little boy, who said, "No, father, I will not go there; they kill people down there."

9814. I apprehend, however, that it is not the boys that decide whether they will go down, but the parents?—Perhaps so, in most cases.

Mr. George Frederick Ansell, called in; and Examined.

Mr. *G. F. Ansell.*

9815. Sir *Philip Egerton.*] I believe you are employed in the Royal Mint?—I am.

9816. How long have you been employed there?—Ten years.

9817. And you have devoted your leisure hours to experimenting with a view to devising instruments to ascertain the presence of deleterious gases in mines, have you not?—Yes.

9818. What principle have you adopted in your experiment?—The principle of diffusion by which gases have motion amongst themselves and through substances which separate them from the ordinary atmosphere, the gas accumulating within a vessel makes itself evident by pressure.

9819. Is the application of this principle an original one of your own?—The application is entirely original.

9820. Have you any means here of showing the Committee what you mean by diffusion of gas?—Yes (*producing a glass vessel*).

9821. *Chairman.*] What gas have you there?—Ordinary coal gas.

9822. What do you call that chemically?—Coal gas is the name; it is a mixture of different carburetted hydrogens, and contains, in most cases, free hydrogen. (*The Witness exhibited various instruments to the Committee, illustrating their use by experiments, especially dwelling upon the explanation of an instrument containing a column of mercury, which led him to the adoption of the Aneroid Barometer Indicator for the pocket, and handed in an explanatory statement, for which* vide *Appendix.*)

9823. You have exhibited to us some exceedingly ingenious instruments, one of them to communicate to a distance the presence of explosive gas, and another to show the presence at a distance of carbonic acid gas?—Just so.

9824. And also another instrument to give immediate notice of a sudden outburst of gas?—Yes; and the fourth instrument to show the amount of gas that is present.

9825. The fourth is a portable instrument?—Yes.

9826. What would be the expense of an instrument for communicating the presence of explosive gas by slow accumulation?—It would be about a guinea, Mr. Short tells me, irrespective of the telegraph. I was told that the telegraph would be about 6 *l.* a mile. I must say that I am not a business man, and know very little about such business.

9827. How many of such instruments should you propose to put in a mine?—According to the opinion of some managers who have spoken to me about it, some three or four instruments might be advantageously placed in each mine, because there are places which they practically do not visit more than once in 24 hours, and where gas does accumulate occasionally; and perhaps even they might not visit those places once a week.

9828. You propose to put those instruments in the places not habitually visited?—In the places not habitually visited, and there they would give warning if the gas should accumulate.

9829. But there might be gas in the neighbourhood of such an instrument, that the instrument would give no notice of, might there not?—Unless it came to the instrument, certainly it would give no notice of it.

9830. You might have gas 50 yards off, of which that instrument would tell you nothing?—Yes.

9831. If you had gas 20 yards off, would that be so?—Unless the gas was actually in contact with the instrument, the instrument would give no warning. The intention is that the instrument should simply give warning of gas in the neighbourhood where it is placed. I am not a professional miner, but I have seen somewhat of mines. At the end of a working place gas accumulates, and it is in a confined space, say four feet high by eight feet wide. Such a volume of gas would be a dangerous amount to accumulate. It may be at a place which has been shut off for months; but the intention is that this instrument should give the people warning that gas is there without the need of sending a man. I believe that by-and-bye, when the miners become accustomed to the instrument, they would not require to send a man, except once a fortnight, or something like that.

9832. Sir *Philip Egerton.*] How often would the battery require attention?—I left one in the House of Lords, and then took it to my own house, I happened to forget all about it, and at the end of a month it was in perfect order.

9833. Would either the heat or the hygrometric condition of the mine interfere with the battery?—Not at all.

9834. Mr. *Woods.*] How long is it customary in the case of ordinary telegraphs to leave the batteries without replenishing?—I believe about a year; but they use a sulphate of copper battery of a different intensity. If the mine owners do not want to ring a bell, that battery would be the means of saving great expense and trouble.

9835. Supposing there were a large extent of goaf in which the roof had not yet fallen, and it became charged with gas, and your instrument was near the gas, if there was a sudden fall of roof which expelled an immense quantity of gas, I apprehend that your instrument would not record until the roof fell?—Not until the gas having accumulated reached the instruments.

9836. Not until the gas was driven off by fall of roof, or otherwise, upon the place where the instrument stood?—Until the gas was liberated, and came in contact with the instrument, there would be no indication.

9837. You know what a large extent of goaf, with a roof unfallen in a mine, is?—Yes.

9838. It has been given in evidence, that when the roofs of the goaves fall in, there is frequently a large quantity of gas suddenly driven out upon the main air-way, or the working places in the mine; are you aware of that?—Yes.

9839. If your machinery were standing near the goaf, I apprehend that it would not record the presence of gas till the fall of roof took place?—Certainly not, because the gas would not

not be liberated till that occurred; but supposing you anticipated such an accident, you would protect the instrument by placing over it a piece of stone, which would stand a considerable blow, and then my opinion is that before the roof could have reached the floor, the instrument would have given its warning.

9840. Mr. *Liddell.*] How many lines of metallic wire are required to connect the battery with the indicator?—Only one; in the case of the house-top telegraph, which is of the size of a man's thumb, they put something like 25 wires; I would suggest that such a wire could be conveyed from the little cabin below through the main roads of the mine, and then each wire could be separated off to the particular instrument intended.

9841. It would be requisite to protect that wire in some way from contact with any other substance, would it not?—The telegraph makers sell it already insulated, and you have nothing to do but to lay it along against the rails, or the sides of the gallery.

9842. Is the insulation sufficiently strong to protect the wire?—Yes, you see it in the case of the house-top telegraph; it is in practical use there.

9843. Supposing that a fall of stone or coal took place, or that the roof dropped upon the wire, would not that injure it?—Supposing that it fell with force it might cut it entirely in half, in the same way as it would crush a truck, but the engineers and managers who were so good as to give me their opinions, suggested that the sleepers on which the rails upon which the tubs run might be grooved; the wire would lie along in that groove under the rail, and then if anything like a fall of roof or accident took place, it must first cut the rail.

9844. The rail itself would form a very useful and powerful protection?—Yes.

9845. But it would be requisite to protect the wire in some shape or other?—Manifestly, because if you have the fall of a roof, you may have the fall of a ton weight; a thick iron wire would be broken by such a fall; it is only a question of how much pressure such a wire could sustain.

9846. Mr. *Woods.*] It occurs to me that the greatest danger to your wires would arise from the breakage of the rails, or from waggons getting off the road, which you are aware is a common thing?—Yes, but instead of placing them under the rails, my original suggestion was that they should be carried along the roof in the same way as in the mines in Northumberland and those northern counties; where they have a wire rope carried along in a similar manner to that on the old Blackwall Railway.

9847. Mr. *Liddell.*] The fall of a roof is a thing that occurs very often?—Frequently.

9848. And it would be rather dangerous to risk the breakage of a wire by that, would it not?—Those are mechanical difficulties which a mining engineer could consider.

9849. Mr. *Greenall.*] You have considered the subject, and think that it could be got over?—I think that it could be got over; care of course would be exercised, as it is now; for in walking in a mine, the manager would say, for instance, "Do not touch that, it is likely to fall," they habitually examine the roof.

9850. And if it fell it would crush the wire?—It would then be hopeless for the wire.

9851. Mr. *Liddell.*] It is quite clear then, that as the lives of all the men employed in the pit would be rendered dependent upon the correctness of the indicator, the greatest possible precaution must be taken to obviate that risk to the conducting wire?—Of course; but it seems to me, that supposing it were adopted, a special rule should be that the man who went round to examine the workings, should see that the roof was in order, and that there was no probability of accident, and that if there were any probability, he should put something to support it.

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9852. Mr. *Greenall.*] It would be the daily and hourly duty of the viewer to look after the roof?—Yes, as it now is his duty.

9853. *Chairman.*] Whose duty would it be, according to your view, to look after your instrument?—The man called the foreman or the under viewer, I should think. They are both remarkably intelligent men as a rule.

9854. Have you explained your instrument to any firemen or viewers?—Yes, I have done so, and they think that there are places in the mines where they might be used.

9855. Have you found any difficulty in making them understand the instrument?—Not the least; I found them in the first instance sceptical, seeing a thing which appeared to be contrary to nature; but there was manifestly a desire to understand it, and after an hour spent in explaining it, they would be convinced of the principle; then they express a desire to go into the pit and see it tried, and then they express confidence in it.

9856. You think that it would not be difficult to qualify them to manage it?—So far would it be from being difficult, that I have found them very anxious to understand it entirely, and one man in particular spent a couple of hours with me to make himself conversant with it, and I afterwards found him explaining it to his fellow overmen.

9857. Have any experiments been made with your instrument in any mines?—Yes, in the mines of Northumberland, and Durham, and Wigan.

9858. Who looked after the instruments in those cases?—In one case the manager sent me and the under viewer down, and in one case he went himself.

9859. You have had an instrument then, and have worked it in a mine?—Yes.

9860. And under the inspection of the under viewer of the mine?—Yes, I have a note from him on the subject; but it is a private note, and I do not consider that I have a right to publish it, unless he gives me his permission.

9861. Is it the result of your inquiries among the managers of mines, that they would be willing to give your instrument a trial?—Distinctly; I found amongst the managers themselves, every desire to give me an opportunity of trying it, and they took the trouble to prepare mines on purpose for me. In the case of some mines that I went into where no gas could be found, they would say, "To-morrow morning at 10 o'clock we will be prepared for you;" and they would take down a brattice and be prepared for me, of course turning out the miners for that purpose, in the first place.

9862. There would be no difficulty, I suppose, in the use of your portable instrument?—None at all.

9863. Mr. *Powell.*] Can you give me the date of the patent which you have taken out?—I think it is the 9th of March 1865.

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9864. *Chairman.*] I understood you to say that the portable instrument required very great delicacy in the making of it?—Yes.

9865. But supposing it to be well made in the first instance, is there any great difficulty in maintaining it in an efficient state?—Not a shadow; I have an instrument which has been in many people's hands for a year or more, and is now in use at one of the works of Wigan, belonging to the Ince Hall Colliery Company. I believe I may mention that fact, because by the influence of the Mining Association, they have given me every opportunity of trying the thing fairly. It is the first instrument that I made. I have left it at Wigan with the under viewer, Mr. Baldwin; he was with me in the pit when I experimented, and a gentleman associated with the colliery read the barometer, and called out the figures, and the under viewer and I waited at the end where the gas was, and made the second reading. Then I called out the new figures to the gentleman who had originally made the reading; by that means there could be no collusion at all. The fireman, or the under viewer, gave us the indications from his lamp as we went on. When I came out of the pit, the under viewer said, "I should be obliged if you will lend me that instrument, because I should like to try one." I lent it to him, but I said, "Take care of it, for it is the original." I had previously lent it to Mr. Atkinson, and he had it for some time to make a report on.

9866. Mr. *Liddell.*] Was that Mr. Atkinson the Inspector of the Durham District?—Yes.

9867. *Chairman.*] Do you think that such an instrument might be carried about in the pocket of the fireman or under viewer, without its being damaged?—Yes; unless they were to play pitch and toss with it, as somebody suggested might be done.

9868. Would it be easy to test the efficiency of the instrument by the means of gas?—There would not be the least difficulty. At most of the collieries they make gas for the offices, so that it would not be difficult to see that the instrument always came up to a certain standard, in a definite mixture of gas and air.

9869. What is the price of that instrument?—Mr Short tells me that he could not make it for less than six guineas.

9870. Is it in use now in any mines?—It is not in any except those to which I have lent instruments to the managers, to whom I referred.

9871. Mr. *Greenall.*] Is it for purchase now?—Mr. Short would be glad to make any. I may mention, that I had two ordered from France.

9872. Who ordered them in that case?—The Abbé Moigno wrote to me, he is a man of considerable notoriety in France.

9873. Mr. *Liddell.*] Does the heat of the body produce any effect whatever upon the instrument?—Not enough to deteriorate the instrument; but supposing that you wished to use it in a mine, it is necessary to have it of the same temperature as the mine. That is done by carrying it by the ring, or letting it lie on the floor; and you can see when it has become of the same temperature as the mine by the hand remaining stationary; then you take off the back and raise it up into the suspected atmosphere.

9874. Has motion no tendency to derange it?—Not at all. Supposing that you are sinking in a pit, the valve being open indicates the amount of fall that you are making, but you know the difference between the fall of a barometer when descending a pit, and the fall of a barometer from gas, by this circumstance, that if it is a fall from descending a pit, that fall remains; whereas if it is from the gas, the hand travels back.

9875. Is not any sudden jar liable to derange the mechanism?—Not in the least. Men may jump with such an instrument in their pockets, without hurting it. Alpine travellers actually do so.

9876. I believe every facility has been given you by the Mining Association of Great Britain to test the value of your invention?—Every facility; and I have found them not only offering me every facility, but positively going out of their way to do it. The Mining Association of Great Britain did not become acquainted with the subject till two months ago, I think, and from that time their secretary, Mr. Day, most courteously put himself into communication with me, and said, "Should you make any arrangements or plans, we will fall into them." I thought it much better for them to make their own arrangements, and they have fixed the time, about a fortnight ago, for testing the plan at Wigan. At Wigan I am invited to make another visit in August.

9877. Can you tell us what the result of your visit was to Newcastle-upon-Tyne to exhibit your invention, and prove its use in the pit?—I was invited to give a lecture at the Northern Institute of Mining Engineers at Newcastle. I gave a lecture, and it excited a considerable degree of interest. Some of the gentlemen at once invited me to go to their pits, as they were anxious to see if the instrument worked there as it did in the laboratory. I went to the pit of Mr. Simpson, though perhaps I have not the liberty to say so. Mr. Simpson will form his opinion, and let the Mining Institute know the result, I believe. In my own opinion, and in that of the under viewers who got the results which I have shown here, the instrument will no doubt succeed in the mines.

9878. When did you give this lecture to the Mining Institute at Newcastle?—On the 2d of June.

9879. Have you delivered a similar lecture at Manchester?—Yes.

9880. And are you engaged to go to Staffordshire for the purpose of delivering a similar lecture?—I am, and to other districts, in August and September.

9881. And to the Midland Counties?—To Chesterfield, Dudley, and Scotland, and to Wales, if it is desired.

9882. To all the mining districts of Great Britain, in fact?—Yes; I might almost say that the mines have become my own property, because there is every possible facility given to me. There is only one desire among the mine owners, it appears to me, namely, to have the truth.

9883. Will you state to the Committee whether, when you visited those pits in Northumberland, Durham, and Lancashire, there was any appearance of gas in the workings except when the places were specially prepared for the purpose of your experiment?—When I went into the pits I took the instrument with me, and I invariably made it a practice to see if I could detect gas; I failed to detect it, except in one case, where I found 3 per cent.; it was in a return current close against the upcast shaft.

9884. Did you direct the attention of the gentlemen

gentlemen with you to that circumstance?—It was an exceptional case, and I am hardly at liberty to mention it; but I believe that the pit had been partially prepared for me in that case; in other mines I failed to detect gas, either by the instrument or by the lamp.

9885. Is this instrument purely your own invention, or have you been assisted in its construction by other persons?—It is entirely my own idea, but Mr. Short has made it.

9886. Under your own instructions?—Yes; Mr. Short has suggested little improvements; we are at present at work upon an instrument, a modification of the Bourdon barometer, which is Mr. Short's suggestion entirely.

9887. Have you had any orders for these instruments?—None for England at all.

9888. How do you account for having received no orders for them in your own country when you have had two orders from abroad?—The only way in which I can account for it is, by saying that it is what the world calls a new matter. You might be fond of an umbrella, when you had one, but it might be a long time before you were induced to buy one, because you had not become used to it; so with these instruments, I think the mine owners will wait till their own committees have made reports upon the subject, and then my belief is they will buy them.

9889. May I ask you how the thing came to the knowledge of these French managers of mines who gave you the orders?—It was the Abbé Moigno who ordered them; in his note to me he says that he read the account of my instrument in the "Society of Arts Journal," and that he had no right to doubt the truth of what was there stated. He ordered two from me, and he says that the Director of French Mines, M. Chagot, is desirous of having them.

9890. Mr. *Fawcett.*] The Abbé Moigno is a mathematician, and not a miner?—He is a mathematician. He has written to me for the sake not of himself, but of this Director of Mines.

9891. Mr. *Liddell.*] Do you know whether he has done so by order of his Government?—I do not know; he does not state that in his note.

9892. The fact is that the order was given to you without the person from whom you had the order having seen the instrument?—Quite so.

9893. You do not know whether those instruments are actually in use in mines?—None excepting those which I have lent in England.

9894. Those two which have been ordered from France have been ordered probably by some scientific body or association?—No; by the Director of Mines, to be tried in the mines. I imagine that, being Director of Mines, he must be a Government officer.

9895. Mr. *Greenall.*] What was it that drew your special attention to this subject?—It would be difficult to say. Many people were speaking to me of one thing and another, and one man said, "Look at these miners how they are blown up; why do not you do something for them?"

9896. Has it been long in your mind?—Since 1862; and then I went down to some pits in Derbyshire on purpose to see the pits, and the conditions to be met.

9897. Your plan has been some four years maturing to its present condition?—Just so; but I did not begin to work upon it till the beginning of 1865. I believe that the Mining Association and the Northern Institute of Miners mean quite fairly in the matter, and are prepared to test it fairly.

9898. That the instrument should be subjected to that tribunal is what you desire, I suppose?—I desire it beyond everything. It seems to me that those bodies are their Parliament. Individual owners will have nothing to do with it scarcely, until the body has agreed to it; but they have a great disposition to use everything that is proper. There is every disposition on their part to get as much information as possible on these subjects, and I believe they would use my indicator if it answered the purpose for which it is intended; otherwise I would not wish it used.

9899. You think your invention will have fair play, in fact?—I am certain of that; they are all men of respectability, and I do not think that men of that sort are apt to cheat. I have no fear of being cheated, at all events.

9900. Mr. *Fawcett.*] Have you sent this instrument to the Museum of Practical Geology to be investigated by practical men there?—A gentleman there told me that within a day or two he would have some of the instruments, and within a week, I think, they will be supplied.

9901. That would be a competent body to investigate the matter, I presume?—Yes.

9902. And I suppose the best?—Yes.

9903. Mr. *Liddell.*] Am I right in supposing that it was at the suggestion of the Mining Association that you came here to-day to give this evidence?—It was; but I believe that it was the intention of others that I should be invited, even if it had not been the wish of the Mining Association of Great Britain. I should have given precisely the same evidence if I had been invited by anyone else, however.

Monday, 18*th June* 1866.

PRESENT:

Mr. Ayrton.	Mr. Greenall.
Mr. Clive.	Mr. Liddell.
General Dunne.	Mr. Neate.
Sir Philip Egerton.	Mr. Hussey Vivian.
Mr. Fawcett.	Mr. Woods.
Mr. W. O. Foster.	

CHARLES NEATE, Esq., in the Chair.

Mr. Thomas Emerson Forster, called in; and Examined.

Mr. *T. E. Forster.*
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9904. Mr. *Liddell.*] You, I believe, are President of the North of England Institute of Mining Engineers?—I am.

9905. Are you also Manager of the Seaton Delaval Colliery?—Yes.

9906. And Consulting Viewer to the Earl of Lonsdale's Collieries in Cumberland?—Yes.

9907. You are also, I believe, Consulting Viewer to several other Collieries in the counties of Northumberland and Durham?—Yes.

9908. Have you been long engaged in mining operations?—It is 49 years since I first began.

9909. Will you state the number of persons you have in your employ?—At Seaton Delaval we have upwards of 1,000 men and boys, and including the other concerns which I am engaged in, altogether there are between 7,000 and 8,000 people.

9910. I will take you to the subjects of complaint on the part of the workmen. Are there weighing machines placed at all the pit banks in your district?—Yes, at every pit bank in our district there is a weighing machine.

9911. Without an exception?—Without an exception in Northumberland, and I believe that it is so also in the county of Durham in every instance but one, so far as I am aware.

9912. The coals are weighed, and the true quantity is thus ascertained?—It is.

9913. Will you state how often the wages are paid to the workmen?—They are paid once a fortnight.

9914. Is that invariably the case?—Invariably.

9915. What would be the effect if a uniform system of weekly payment were adopted?—It would be a very serious thing, in my opinion, for the workmen.

9916. Why would it be a very serious thing for the workmen?—They are paid on Friday, and they leave off work entirely on the Saturday; many of them are away on the Monday, and generally some 30 or 40 per cent. are absent on the Tuesday, and it is Wednesday before they get to full work. If the wages were paid weekly probably that would happen every week.

9917. Then the effect of the payment of wages weekly in your opinion would be that no man would work much more than four days at the outside, and sometimes not more than three days a week?—That is so, and it would be a very serious thing to the families of the workmen.

9918. Will you state to the Committee how those free days are employed, because you say that they are paid on Friday, and are off work on the Saturday, do you not?—On the Saturday we do not ask them to go to work.

9919. On the Monday they do not go to work?—Many of them do not; in fact, many of them not until Wednesday.

9920. How are those days for the most part employed?—I cannot tell; but I suppose there would be a good deal of time employed in drinking beer, walking about, going to the sea side, shooting, and all those things.

9921. The colliers are very fond of games of different kinds, are they not?—I do not think that they are quite as bad as they used to be; for instance, in my early days they were dog fighters, but it rarely happens that you find that now.

9922. Do they practise bowling?—Yes, they practise bowling a good deal, and they have a very bad game, called pitch and toss, and I am sorry to say that, in the pit district, they get so much money that they gamble on the Sunday a great deal.

9923. A good many of them are runners at foot races, are they not?—Yes.

9924. These amusements go on extensively during those days when they are not at work?—Yes.

9925. Are they fond of their gardens, for the most part?—A good many are very fond of their gardens.

9926. They go in a good deal for the flower shows, and the things of that kind in the neighbourhood, do not they?—Yes, occasionally.

9927. With regard to the requirements of the Act of 1860, that boys under the age of 12 shall either have a certificate that they can read and write, or a certificate that they are attending school a certain number of hours in the week at the time; have those conditions of the Act of 1860 been complied with for the most part, within your knowledge?—After the Act of 1860 was passed we had some boys that were at the work from 10 to 12 years old, for whom we got certificates from a schoolmaster that they could read and write, but now we have none under 12 years of age at the Seaton Delaval Colliery.

9928. The inference I draw from your answer is, that there are no boys employed under the age of 12 years who have not got certificates that they

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can read and write, or else certificates that they are attending school at the time?—Yes, that is so, but at Seaton Delaval now we have no boys under 12 years of age in the pit.

9929. What is the case with the other collieries? —I suppose there are some in Durham where they are employed from 10 to 12 years old, but not a great number.

9930. Is it always very easy to discover whether a boy can read and write, or whether he is attending a school at the time?—When we had boys between the ages of 10 and 12 we used to make them sit down and write besides getting a certificate from the schoolmaster that they could do so.

9931. So that you took pains to ascertain whether you were really complying with the Act? —Yes.

9932. What is the system pursued as to providing the means of education, is there any want of opportunity and means of educating the children?—None whatever.

9933. Will you give the Committee some idea of the means of education afforded to the children of the colliers?—At Seaton Delaval there are two schools at the old collieries, one at the New Hartley and one at the new colliery at Seaton Delaval, altogether somewhere about 450 boys and girls at school every day.

9934. Are they mixed schools, or are the boys' and girls' schools separate?—They are all mixed.

9935. Are many of these schools under Government inspection?—None in Seaton Delaval, but in the county of Durham there are a great many under Government inspection.

9936. What would be the effect if boys were not permitted to enter the mines until they were 12 years of age?—Practically speaking, at Seaton Delaval, they do not go down the pit till they are 12 years of age; but before they are 12 they are generally employed in picking out stones, and doing any work on the bank.

9937. Then the effect of a stringent regulation of that kind would be to throw a considerable number of boys out of employment, would it not? —Not a great many, I think, because they would go to other employments round the colliery.

9938. You say that a great many of them are employed in screening coals, and so on. If there were a regulation against the employment of boys of that age in and around the colliery, those boys would be thrown out of employment, would they not?—I think it would not be prudent to prevent them from working about the colliery on the bank.

9939. Would the parents like a regulation of that kind?—The parents would not like it at all.

9940. Supposing that the working time were limited to eight hours a day in the case of all boys under 14 years of age, what would the effect of that be?—The effect would be, that there would be a great deal less coal worked, and a great many of the men would not be required.

9941. Would the price of coal be affected by such a regulation?—Of course the cost of production would be considerably increased, and the selling price, as a natural consequence, would also rise.

9942. We have heard a great deal on this Committee of sending down relays of boys; what is your opinion upon that point; could a system of relays be safely adopted?—You could not get the boys, even if that system could be adopted, you could not get the number that would be required for two shifts in a day.

9943. You mean that there are not boys unemployed now in sufficient numbers to make up the deficiency that would be created?—Yes, I mean to say that.

9944. Is it within your knowledge that there are a large number of boys of that age who do not find any employment in the counties of Durham and Northumberland?—No, I do not think there are any but what are already employed who are at liberty to go down the pits or to work about the pits.

9945. Mr. *Greenall.*] I think you said just now that you tested boys to see whether they could read and write?—Yes; that was between 1860, after the passing of the Act, and the time when we did not employ any under 12 years old; besides that, we got the certificates of the masters.

9946. If you met with a boy between 10 and 12 years of age, who could not write, did you reject him?—Certainly, he would be rejected, and would be sent home to go to school.

9947. Mr. *Foster.*] Supposing that there were a sufficient number of boys for two shifts, are there any other practical difficulties in the way that you could name to the Committee?—It would be very costly to have two shifts instead of one, in the first place; and in the next place, it would be very dangerous when the boys were changing: when one shift was coming out, and the other going down, for the two to be meeting would be very dangerous.

9948. Would the comparative irregularity of the working of miners, compared with those engaged in other branches of employment, be an obstacle in the way of employing a double shift of boys?—I do not exactly understand the question.

9949. You have spoken of the pay Saturday as being an idle day; then on the Monday a great many are off work; and even on the Tuesday, I think you said, there would be frequently 30 or 40 per cent. of the men away?—Yes.

9950. The absence of the men would render unnecessary the attendance of the boys, would it not?—The boys are obliged to be there; but it increases the cost to the owners of the colliery.

9951. And that would be aggravated by a double set of boys?—No question of it; it would not only be a double set of boys, but you must also have a double set of horses and ponies; you could not expect the horses to work 16 hours. The expense would, in that way, be increased most considerably.

9952. And then, on the Saturday after pay day, these two sets of boys would really have, I presume, little, if anything, to do?—On the Saturday the boys do not go to work, because the men are entirely absent on that day; but on the Monday, when about 40 per cent. of the men are off work, the boys are there, and have to be paid.

9953. Supposing there were a plan, such as has been suggested, of boys working alternate days, instead of half days, the one set would not get more than two days' work in the pay week? In the pay week, as we call it, when they are off work on the Saturday, they would only get two days, some of them; and in the other week three.

9954. Would the wages that the boys would earn by that two days work be sufficient for the food and for the clothing of those boys?—It would not only not be sufficient, but we could

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not get a sufficient number of boys to allow of the system being adopted.

9955. I am supposing that you could get the number of boys; and I ask, would the wages earned for those two days be sufficient to compensate their parents for feeding and clothing them?—Certainly not; the parents would never agree to that plan.

9956. Sir *Philip Egerton.*] I think you stated that the schools at Seaton Delaval are not under Government inspection?—No, they are not.

9957. Are they day schools, night schools, or Sunday schools?—They are day schools during summer and winter, and in winter they have also night schools; boys would not go to night schools in summer.

9958. How are those schools supported?—The parents pay for their children.

9959. How much do they pay for each?—From 3 *d.* to 6 *d.* a week.

9960. Do you find that the young people take advantage of those schools?—Yes, and they attend far more regularly than if the owners were to pay for it. The fact is, that if the owners were to pay for it entirely the mothers of the children would always be taking them away, but now each child pays on the Monday morning for that week's schooling, and the parents are very anxious that they should get the benefit of that 3 *d.* or 6 *d.*

9961. From what source do you derive your information as to these schools, if there are no annual reports?—From the masters of the schools.

9962. Do you mean that they keep tabular statements?—Yes, they keep regular statements.

9963. How many hours do the boys work in the Seaton Delaval Colliery?—Twelve hours.

9964. And the men work how long?—They work from 6½ to 7 hours.

9965. Then the boys work a longer time than the men?—But it is not such hard work for the boys; in fact it is very easy work.

9966. Do you see any difficulty in the way of limiting the hours worked by the boys to the hours worked by the men?—It could not be done. In the first place we could not get the number of boys to get two shifts.

9967. I am not speaking of having two shifts, but as to restricting the hours of the boys to those of the men?—If the men did the boys' work, we should not get the quantity of coals that we get now.

9968. What is the work of the boys?—To begin with the lowest grade, they trap doors.

9969. Little boys 10 years old can attend to the doors?—Yes; then the next class are the drivers, and the third class are the putters, who bring the coals from where the men work them to the stations where the large horses take them away. These putters have the ponies found them by the owners.

9970. If you were to restrict the hours of the boys, there would be a considerable quantity of coal got by the hewers that could not be got out of the mine?—Yes, certainly; you would have to dismiss 25 or 30 per cent. of the hewers, and that would not only increase the cost of production, but it would, as a natural consequence, increase the selling price of the coal.

9971. Mr. *Woods.*] It would greatly decrease the production of a colliery, you say?—No doubt of it.

9972. You said that there was weighing in Northumberland at every colliery, excepting in one instance, did you not?—That one instance is in Durham.

9973. What is the system at that one colliery?—The coal is very tender there, and it is wet, and it weighs very heavy when the wet is in it; I fancy that is the only reason why that is an exception to the rule.

9974. How are the men paid in that colliery?—They are paid by measure.

9975. Will you tell the Committee why weighing is almost universally adopted in Durham, in preference to measuring?—In both Durham and Northumberland it is adopted because it is the most correct way of paying men, and is decidedly the best plan.

9976. I think you said that a sufficient number of boys would not be obtainable in case they only worked on alternate days?—They could not; the pit would have to stand.

9977. Do not you think that if the wages of the boys were immensely raised, it would draw them from other trades into that of coal mining?—No, I do not think it would; it must be remembered that a pitman, in that district, is a long way from any manufactory, and he could not get boys to come from large towns like Newcastle or Shields, to go into the pits at all.

9978. You admit that it would tend to raise the rate of wages paid to the boys, if the system of alternate days were adopted?—I do not think that it would tend to raise the rate of wages paid to the boys, but it would increase the cost of producing the coals, because you would get a less quantity of coals raised.

9979. Is there no other trade in your neighbourhood from which boys could be drawn in great numbers to supply the deficiency created by sending them to school every other day?—Newcastle is 10 miles from us, and Shields six or seven.

9980. Will you take a wider view than that. Taking the whole of the coal fields of Northumberland and Durham, would not the effect be to draw boys from other trades into that of coal mining?—No, I do not think so, because unless boys are living about a colliery they are not very keen about going into the pit.

9981. Why not?—Because they do not like it; they have not been accustomed to it. In the case of these other boys, their fathers go down the pit, and their elder brothers go down the pit, and then they are anxious to go, but it would be a different thing with strangers.

9982. Is it within your knowledge that parents who have not themselves been employed in or about a colliery object to send their children into the mines?—We have a few that come down as labourers from the south, from Warwick, for instance; they worked perhaps 12 months, and then they go down the pit, and the boys go down too, but it is not till they are a little accustomed to the thing that they go down; it would be rather dangerous for entirely strange boys to go down the pit, until they knew something of it.

9983. Are you enabled to say that men who work underground in coal mines receive a higher rate of remuneration than those who work above ground?—Yes, considerably.

9984. The same skill and intelligence which might be employed aboveground, if it goes down below, receives a higher rate of wages?—Yes. Some of my best men at Seaton Delaval are earning

earning 7 *s.* a day. The average of the whole colliery is 5 *s.* 6 *d.* per man per day. We find them a house free of rent, give them their coals for nothing, and give them a garden, and if they get their little finger hurt they get the doctor to attend them free.

9985. Sir *Philip Egerton.*] I think you stated that you had no boys at Seaton Delaval employed under 12 years old?—None.

9986. Do you see any difficulty in making that practice compulsory upon other districts?—No, I should like to see it myself. My reason is this, that I think that from 10 to 12 years of age they would get more education than they would get in all the rest of their life.

9987. You find that the practice has worked well in Seaton Delaval?—Very well indeed.

9988. And you see no reason why it should not work equally well in other districts?—Not the slightest.

9989. Mr. *Woods.*] Would you accompany the prohibition against children going into the mines until the age of 12, by a compulsory attendance at school?—No, I think not; I would let the parents look after their own children from 10 to 12 years of age.

9990. Bearing in mind that there are mining districts in England where there is competition between different trades, although you have described the Durham and Northumberland colliery district as having no such competition, the men there being all miners, what would be the effect, in your judgment, of restricting the time at which children might go to work in the particular trade of mining, where there were two or three trades competing for labour. If you were to restrict them from going into mines under 12 years of age, do you think that that would have a tendency to exclude children from working in mines?—I think it would. I think that if you were near to the great spinning manufactories, there is no question that the boys would go to the factories, and then the collieries would, of course, be stripped of boys.

9991. And that, of course, would tend to place mining operations at a disadvantage as compared with other trades?—It would.

9992. Not only in their boys' labour, but in their adult labour?—Probably it might, indeed there is no question that it would. Still I think everybody must be anxious to have the children educated, and from 10 to 12 years of age they would get more education than at any other time.

9993. I quite agree with you in that, but the question is how it is to be done, is it not?—Yes.

9994. With regard to the system of measuring, do you see any reason why, in a county where measuring is the prevailing system, there should be any legislative enactment to change it to weighing?—I think I would have it all by weight; there is not, in my opinion, such a thing as measure in coals. If a man sends a hundredweight of coal out of the pit, he ought to be paid for a hundredweight, but in measure you only guess at it.

9995. But supposing that the man has made his agreement to send it out by measure?—If he has made his agreement to send it out by measure, that is a different thing, but then he cannot get the correct measure; that is the difficulty.

9996. Mr. *Fawcett.*] All the working colliers as strongly object as you do to the system of being paid by measure, do not they?—All the men in our district prefer weight, and they are all paid by weight; we never have the slightest trouble about it.

9997. You have probably heard that in other districts the men would very much prefer being paid by weight instead of measure?—Yes, I have heard so.

9998. Can you explain, if that is the case, why in certain districts the colliery proprietors should insist on paying the men by measure, and not by weight?—No, I do not know the reason why they will not pay by weight instead of measure; but if they were to ask my advice, I should recommend them to adopt the weighing system; it is the most correct and the fairest for all parties.

9999. And you would not be opposed, would you, to some legislative enactment on the subject?—I do not know about that.

10000. There are 1,000 people employed in your works at Seaton Delaval, you have said, have you not?—Yes, in and about the pit.

10001. Can you give us any idea of the number who can read and write with facility?—I should think the whole of them; perhaps there may be a few of the older men who cannot, but, generally speaking, they can.

10002. Do you think that the state of education of the men employed in your mine represents fairly the state of education generally prevailing in the county of Northumberland?—I think it does.

10003. But not in Durham?—I think they are quite as well up in Durham as we are in Northumberland, as far as regards education.

10004. You would like, as I understand you, that an Act should be passed to prevent boys from being employed at all in a mine until they were 12 years old, whether they could read and write or not?—I do not know about an Act being passed to that effect, but I think it would be very desirable that no boys should go down a pit till they were 12 years of age.

10005. Would you see any objection to passing some measure to secure those boys who are employed on the pit's mouth before the age of 12, being at school a certain time in the week?—They have an opportunity of going to the night school during the winter, and nobody can get them to go during the summer.

10006. Do you see any objection to those boys being treated in the same way as boys in factories, and not being allowed to work unless they were a certain number of hours in the week at school?—No, I do not see any objection to that; every coalowner in the district would be anxious to see the boys educated.

10007. You said that many of the boys between the ages 12 and 14 were at work under ground 12 hours a-day?—Yes.

10008. Therefore, on the average, they must be away from their homes, including the time that they take in going backward and forward to their work, 13 or 14 hours?—Thirteen hours would be the average time.

10009. A boy employed that length of time would be too tired to attend school afterwards, I presume?—When they come out of the pit they are like little hares running about and playing; they are not at all fatigued.

10010. Still they must have very little spare time, I suppose, left by the time they have had

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their meals?—They get their meat twice a day down the pit; they take their meals with them.

10011. You stated positively that if boys between the ages of 12 and 14 were only allowed to work on alternate days, you could not get the necessary supply of labour?—It would be quite impossible.

10012. Could not the work done by the boys be done by the men?—The men could not do the boys' work, at least I should not like to see them at it; they would get killed by the work.

10013. Do you mean that they would be too tall for it?—Yes.

10014. Is there no agricultural population about your mines?—There is.

10015. If you offered much higher wages would not all the boys engaged in agriculture be drawn into mining?—The number of such is so small that we could not get any great supply from that source.

10016. *Chairman.*] Have you ever been concerned in the management of mines where the payment was by measure?—Yes, about 20 years ago.

10017. Then you speak from experience on that subject, when you say that you prefer payment by weight?—Yes.

10018. Do you see any objection to the weighing machines being subject to the ordinary inspection that the weighing machines in other trades are subjected to?—Not the least.

10019. You would not at all object to that yourself?—Not in the least; I know that the inspector does go to some of the collieries in the county of Durham; our weighman and the men's check weigher try together to correct the machine every fortnight, and we send the weights occasionally to the inspector to get them adjusted.

10020. You think it more satisfactory both to master and to men, that the weights should be tested?—Certainly.

10021. As to weekly payments, have you known any cases in which the workmen were paid by the week?—Not in our district.

10022. Only you think that because they run a little wild every fortnight they would do the same every week if the system were weekly payment?—No doubt of it.

10023. Is it not part of your experience that men are more likely to break loose when they get an occasional holiday, than when they get more frequent holidays?—The men have a holiday every day in reality, because they are only at work six or seven hours.

10024. You have no experience, as I understand you, of what the effect of weekly payments would be?—I have a very good idea that it would be very injurious both to the coalowners and to the workmen themselves, and I think the wives would complain because the men would not bring home as much money as at present.

10025. Do not you think it rather contrary to the natural order of things that the same set of boys should last through two sets of men?—They certainly do last through two sets of men, but the men go down a couple of hours before the boys.

10026. That is to say, that the first shift of men go down two hours before the boys?—Yes; the men commence work in the morning at three o'clock, and the boys do not go down till they commence their work at five, and they are free at five; the second shift of men go down at 10 and come out at five.

10027. How are the boys taken to their places of work if they do not go down with the men?—They walk into the places in some instances, and in some cases they ride on the engine planes.

10028. Do they go by themselves?—The overman goes down with them in the morning.

10029. Supposing that you had 100 boys to take to their work, how many men would you require to take off their other work to see to the distribution of the boys and to take them to their working places?—As soon as the boys get to the bottom of the pit the overman orders them to go to the stables and get the horses, the stables being close at hand; and each boy goes and gets the horse and yokes him to the tub.

10030. At that time there is no coal being taken about in the pit, I presume?—Not in the morning.

10031. But supposing that there were two shifts of boys, they could come down at any time without any greater danger, if there were no coal at that time being taken about, could they not?—But there would be coal being taken about. If they went down before the eight hours expired, of course the whole pit's crew would be going on at their usual work, and they would have to pass from one horse to another until they got to the stables and trap doors.

10032. Then it would require a total cessation of work for some time in order to make the distribution of the boys?—Yes.

10033. For how long a time do you suppose?—I should think it would take an hour.

10034. How long after the second set of men come up do the boys remain?—The first set of men come up at half-past 10 and the boys remain till five and come up with the next set of men.

10035. They come up with the second set of men, in fact?—Yes.

10036. What is the interval, or is there any, between the first set of men coming up and the second set of men going down?—None.

10037. The conveyance of coal in the pit is going on all that time, you mean?—It is going on till the men have to go down; then it has to cease, of course.

10038. The hewing does not go on then, does it?—Yes.

10039. Do the second set of men go down before the others come up?—Yes.

10040. The second set of men are ready to take the work of the first?—Not in all instances, but many of them get into the face of the workings before their partner leaves, and others meet their partners on the passage.

10041. There is as little interval as possible?—Yes.

10042. Is there any regular interval allowed to the boys to take their dinner?—No, there is no occasion for that.

10043. They eat as they are going, you mean, I suppose?—Not at all. The trapper boy may get his dinner when he chooses; the driver boy eats it riding on the horse, and the putter boy sometimes goes into the face where the man is working the coal and finds that the tub is not full, and then he sits down and eats his dinner.

10044. The putter boy is the boy that draws, is he not?—He does not draw, because he has a pony.

10045. Who brings the coal from the working face?—The putter with his pony.

10046. Then the pony can go up to the working face in your collieries?—Yes.

10047. How

10047. How long has that system of a double shift of men gone on in Durham?—Ever since I can recollect.

10048. Do you happen to know whether it existed before your time?—I should fancy it did, except that perhaps previous to my day the men would work 12 hours.

10049. Do you know why there should be that peculiarity in Northumberland and Durham, and not in other districts?—I do not know what reason they may have in other districts for not adopting it, except that the men are pretty well masters, and may do what they like.

10050. Do you think that it would be a more satisfactory arrangement that, instead of having two shifts of men, they should have one shift of men who should work nine or 10 hours?—I do not think that the machnery could raise the coal to bank if that was the case; they could not get the quantity that they get now.

10051. You would have less coal cut, would not you?—Yes.

10052. And that would render it less difficult for the machinery to bring it to bank, would it not?—Yes, but it would increase the cost of production.

10053. The cost of production might be a little raised in your collieries, but it would still be kept down to the same level of price, I presume, unless the general cost of production was raised throughout the country?—I am afraid they could not send coals from other districts to load the ships in our county.

10054. Do you prefer, then, this system of two shifts of men to working with one set of men for nine or 10 hours?—Yes.

10055. You see no way of avoiding the necessity of having one set of boys to work with two sets of men, as I understand you?—No.

10056. You said, I think, that a few of your schools were under Government inspection in your district?—Some or them are and some of them are not.

10057. What is the reason of that; is not the state of the buildings such as to come within the terms of the regulations of the council?—Some of them are not and some are.

10058. That, I suppose, is the reason why some are not under Government inspection?—No, I do not think that that is entirely the reason, but I think that some of the coalowners like to have the control of their own schools.

10059. Mr. *Woods.*] They are willing to pay for it, and they get no aid from the State?—None whatever.

10060. As to weighing and measuring in Northumberland and Durham you said that that was the fairest plan in your opinion?—Decidedly.

10061. Is the whole wage of the collier in Northumberland and Durham paid by the ton?—Yes; at least, when I say by the ton, it is either by the score or by the ton, but still, in any case, the coals are weighed; there are 20 tubs or 21 tubs whichever it may be, to the score.

10062. When it is paid by the score, it is a score of what?—A score of tubs.

10063. Is that weight or measure?—It may be either weight or measure.

10064. When they pay by the score, do they weigh each tub, or do they average the tubs?—They average them.

10065. That is measure, is it not?—No, it is weight.

10066. How do you define the quantity in the tub when you pay men by the score?—They weigh every fourth tub, and they ascertain the weight of each man's quantity by that. Mr. *T. E. Forster.* 18 June 1866.

10067. And the coal is taken to be 20 times the average of those fourth tubs?—Yes.

10068. You said, I think, that there is no other system of estimating colliers' wage in Northumberland or Durham except weight?—Except in one instance.

10069. Is it within your knowledge that in a great many parts of England the colliers' wages are estimated in several items, partly by weight, and partly by actual lineal measurement of the stall under ground?—Yes, but that is a different thing from the weight of the coals. We pay yardage, besides the tonnage, in all the narrow places in our district. We pay yardage, quite independently of the tonnage.

10070. What proportion do the yardage wages bear to the ton wages in any colliery, the Seaton Delaval, or any other that you like to name?—In Seaton Delaval I should think that the yardage would be about 5 per cent.

10071. Then it is a matter of fact that the wages in Northumberland are not paid by weight exclusively?—Entirely by weight upon the quantity of coals received.

10072. But the sum total that the collier receives is not reckoned exclusively by the weight?—Upon the coals it is reckoned by weight, but this yardage is a different thing.

10073. Is this it, that the weekly wages of some of the colliers in Northumberland and Durham contain two items, one item being estimated by weight, and the other by measuring the superficial quantity of coal which the man has hewn?—Some of them are paid by the actual quantity of coals, and some of them are paid yardage where they are employed in driving in the narrow places.

10074. Then the fact is, that the sum total of a collier's wages in Northumberland and Durham is not estimated by the weight of the coal alone?—If you take the yardage price into account, the wages certainly are not.

10075. Then an Act of Parliament requiring that a collier's wages shall be estimated by weight alone would not apply to the present system of working coal even in Northumberland and Durham?—It would only apply to the quantity of coals raised.

10076. Then, when you say that that is the fairest plan, how do you propose to measure the number of yards to a ton?—That is done regularly.

10077. It is done every fortnight by measure?—Yes.

10078. Then, any legislative enactment that there shall be weighing only will not apply to the case as now existing even in Northumberland and Durham?—The yardage would have to be exempted, but the quantity of coals raised would have to be paid for by the ton.

10079. I understand you to say that that portion of the wages which is estimated by weight alone can be weighed at the surface of the ground, and that an inspector can even inspect the scales and weights?—Yes.

10080. How do you propose that there should be any means of testing the measurement in the yardage?—There is no difficulty in it; it is measured

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measured by a chain or a tape line, and the workman is there while it is being measured.

10081. I believe you do not wish the Committee to understand that the boys work in the mine continuously for 12 hours? — Certainly not.

10082. *Chairman.*] Did I rightly understand you to say that the boys did not work on Saturday at all?—On the pay Saturday, once every fortnight, they do not work at all.

10083. And the men do not, do they?—No, the men do not; they go to the market with their wives.

10084. Mr. *Foster.*] Would you wish that the Legislature should lay down the nature of the contract for work done between masters and men, and that it should apply equally to all coal mining districts?—It could not possibly apply to all coal mining districts.

10085. Would you therefore wish the Committee to understand that it would be impossible for the Legislature to say that in every instance the coal should be paid for by the weight raised?—I would have no objection to that; it might be done I think, but you could not lay down a rule which now applies to the Durham and Northumberland collieries, for Lancashire and Yorkshire.

10086. I am speaking now of all coal-mining districts (for we may presume that the Legislature will not legislate for Northumberland and Durham only), and I am asking whether in what you stated with regard to weight, you meant to convey that you would desire that the Legislature should apply it as the only mode of payment for work done to all coal-mining districts whatever?—I think that it would be much the fairest plan if all the working of the coals were paid by weight.

10087. Do you think that it would be a fairer plan than payment for cutting so many yards wide, and so many feet long?—Yes; I think it would be much fairer.

10088. Why would it be fairer?—Because if you pay a man for cutting so many yards long, and so many wide, you have to make a bargain every time it is done; but if you once make a bargain as to the price per ton for working coal to be paid to a man, there it stands.

10089. Supposing that it is more convenient in certain districts to pay the coal by that system, would you go so far as to say that you would forbid, by legislation, a master making such a contract as that, if it was a more convenient mode than any other?—No, I would not forbid it; still my opinion is not altered, that weighing is the fairest system for all parties.

10090. But it does not go so far as that you would actually wish the Legislature to say that wages should be paid in no other manner in any coal district whatever?—I would not say that.

10091. *Chairman.*] Do you know of any reason, operating in any other coal district, that should make measuring preferable to weighing, in your opinion?—No, I do not. This plan that has just been named of payment for cutting so many yards, and a certain width, might happen to be very injurious to the owner of the colliery. We will suppose that the collier is paid at 10 *s.* a yard, for argument sake, and that when he commenced he had a very hard coal, but that when he got a certain distance in he had a very soft coal, that labour would not be entitled to the 10 *s.* a yard, and it would be very unfair against the coal owner.

10092. Mr. *Foster.*] That would be a matter of contract between the owner of the coal and the man, would it not?—Yes, but it would work fairer if the payment were by weight.

10093. Would you go so far as to say that all coal should be got out of the pit under one particular system of working?—No, I would not say that, but when the coal arrived on the surface of the pit, I would weigh it in every case.

10094. Mr. *Liddell.*] You were asked just now, by Mr. Woods, whether in some of the collieries the men did not work by lineal measure on the face?—They do, but that is only in what we call the narrow places, the holings, or winning the headways.

10095. But I understand you to say that, even in the places where the men do work in that way, the coals that they cut are equally weighed at bank?—Yes.

10096. Mr. *Greenall.*] What is the average price of coal per ton on the pit's brow?—It varies very much. I pay at Seaton Delaval as high as 1 *s.* 7½ *d.* per ton to the hewer of the coal. Besides the hewer there is the fireman, the putter, the deputy, and all those other people to pay.

10097. I wanted rather to ascertain the selling price of a ton of coal?—It varies from 10 *s.* a ton on board a ship, to 6 *s.*

10098. The object of my question was to enquire what is the proportion of the wages which, out of that 10 *s.* (or whatever the figure may be), is paid to the men and to the boys?—The wages to the men and boys would probably be about 3 *s.*

10099. Mr. *Fawcett.*] That does not include all the labour on the mine, not the engine man for instance, does it?—You have to include that. There is in the next place the rent, and then the materials (oil, tallow, grease, and so on), wear and tear, locomotive engines, and all those things.

10100. So that, speaking generally, a little over 30 per cent. of the whole cost represents labour, does it not?—But when I said 10 *s.* I did not mean that 10 *s.* was the cost of producing the coal, but the selling price on board ship.

10101. *Chairman.*] Could you give me any reason for your opinion that there would not be boys enough for two shifts?—I know that in our own neighbourhood we have all the boys at work that can work.

10102. Why should not there be the same proportion of boys to men in your district that there is in other districts?—I cannot answer that.

10103. Are a great proportion of the working colliers unmarried?—Generally speaking they are married; but if the children are not 12 years old, we cannot take them.

10104. If instead of there being two shifts of men, the men were to combine and work as they do in other countries, there would not be boys to attend them, as I understand you?—Yes, the boys could attend them; but we should not get the quantity of coals that we get now; for instance, in one of my pits in Seaton Delaval I raise 1,300 tons a day; but if I could only go on for eight hours, I must fall 30 per cent. under that quantity.

10105. But does not the number of boys employed in a pit bear a proportion to the number of men employed at the same time?—Yes.

10106. And if you were to put all your men together

together who are now employed in two shifts, you would not have boys to attend them?—Yes, you would have boys, but the men would not get the quantity that they do now, and the consequence would be, that something like 25 or 30 per cent. of the men would have to be discharged.

10107. Why would not the men get the quantity?—Because the machinery could not raise the same quantity out of the pit in the eight hours; the men could work the same quantity, but the machinery could not raise it to bank.

10108. Mr. *Liddell.*] There are no women, I believe, employed in either the county of Northumberland or the county of Durham about the pits?—Not one.

10109. You are consulting viewer, you have told us, to Lord Lonsdale's collieries in Cumberland; are there any women employed there?—Not one; there used to be many years ago, before the Act passed.

10110. What would be the result of a sufficient body of sub-inspectors (these are the words that have been used by the workmen themselves) being apointed to aid the present inspectors, and to examine internally the mines and collieries?—It would be a very mischievous thing indeed.

10111. Will you explain why it would be mischievous?—Because these men would be something like the firemen, or deputy overmen that we have now, and they would be constantly fighting and quarrelling with the officers of the mine, and there would not be that discipline kept in the mines that there is at present, and hence we should have more accidents than we have now.

10112. When you say that these men would be like the present firemen, you mean by that that they would be the same class of men, do you not?—Yes, the same class.

10113. And in your opinion they would be constantly at variance with your servants as to the mode of ventilation, and as to the general condition of the pit?—Yes.

10114. Is there a strong feeling on the part of the workmen in those collieries, that you are acquainted with, in favour of this body of sub-inspectors?—I never heard it named by any individual that I have under me. The men are perfectly satisfied about the ventilation of the mines in our district.

10115. Our inspector in Northumberland is Mr. Dunne, and Mr. Atkinson is the inspector in Durham?—Yes.

10116. Do they give you notice when they intend to come to and visit a colliery?—They never give us notice.

10117. They come when they please?—Whenever they think proper they come; the pit is open to them, and the plans are there, and they have every attention that can be paid to them.

10118. Is the amount of work involved in a thorough inspection such that it overtaxes the power of the inspector to perform it?—I do not think it does.

10119. Do you think, then, that as far as you know, the inspection is thorough and complete?—I think that there is sufficient inspection in our district, embracing the counties of Durham and Northumberland.

10120. Mr. *Fawcett.*] Can you give any reason why women are never employed in Northumberland and Durham, while they are so frequently employed in some parts of Lancashire?—I cannot; I recollect the Durham and Northumberland coal field for 50 years, and there has never been a woman employed there.

10121. The men would object to a woman going on the pit's bank, I suppose, if she wished it?—I think that both the men and the employers would object to it; it is not a very nice thing to see women about pits.

10122. You never had an application for that employment for a woman?—Never one.

10123. *Chairman.*] How many times during the last five years has the inspector been down your mines?—I really could not answer that question off hand.

10124. You always know when the inspector does come; it is told you afterwards, if not before, I presume?—Yes.

10125. I suppose the inspector generally calls upon you if he has anything to observe?—Yes.

10126. Does he call upon you before he goes down?—No.

10127. Have you any reason to suppose that when an inspector has come, he has come because he has had a complaint made to him?—I do not think there has been a single complaint about the Seaton Delaval Colliery from the time I went there, which is 20 years ago.

10128. You are aware that complaints are sometimes confidentially made to the inspectors?—Yes, and I have no objection to the men complaining as much as they like.

10129. In some of the collieries, however, the workmen are afraid to complain to the inspector?—I tell my workmen to complain as soon as they see anything wrong, and I will see it rectified at once; and the sooner they call attention to it the better.

10130. Do you think that an inspector by seeing the main airways of a mine, and seeing the ventilating power, and generally informing himself as to the system pursued in the mine, would be able to form any opinion as to whether the mine was well managed?—I think so.

10131. You think that it would not be requisite for him to go to all the working places to ascertain that?—No.

10132. Would you recommend that inspectors should occasionally go down all mines, and take such a general survey?—Yes.

10133. The map is always ready for them to inspect, is it not?—Yes.

10134. And the inspector might inquire, "Where are the places where you are now working;" and he might say, "Take me to such and such a place"?—Yes.

10135. And you think that it might have a good effect (I do not say upon your mines), if inspectors made such visits more frequently than they do?—It would entirely depend upon circumstances. If the inspectors had to be the responsible parties, then it would be necessary for them to go more frequently down the pits; and as far as I am concerned it would be a great relief to me if they were the responsible parties.

10136. But in what way would you feel yourself discharged from responsibility if an inspector went down your mine and stayed there two or three hours, or half a day, and, without visiting every corner, merely informed himself as to the general mode of management, and then said to you, "Your mine seems to be very well managed, and I have nothing to observe except in the way of commendation"; in what way would it discharge you from responsibility?—It would not.

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10137. In one sense it would rather increase your responsibility, would it not, because he might add that it would be your own fault with all that management if any accident happened?—Yes; but on the other hand, supposing that he were to find fault with the distribution of air in the pit, he and I might quarrel on the subject, at least there might be a difference of opinion, and I should not be willing to give up to an inspector who only occasionally visited the pit.

10138. If you made alterations at his suggestion, you would consider yourself discharged from responsibility as to the effect of those alterations, I suppose?—No question of that.

10139. But not discharged from responsibility as to other points on which you had not adopted a suggestion of his?—No.

10140. When you speak of responsibility, do you mean moral responsibility or legal responsibility?—Both.

10141. Mr. *Woods.*] Does the recommendation of an inspector free you in any way from the legal consequences attendant on an explosion?—If I were obliged to act upon his recommendation it would do so.

10142. But as you are not, does a recommendation of an inspector under the existing state of the law free you in any way from the legal consequences attendant on an explosion?—Let me point out what the consequence might be; supposing that an inspector recommended a certain thing to be done, and in my view it was wrong, and I acted upon the inspector's recommendation, and an explosion was to occur, it would be a very serious thing for me, I imagine.

10143. Then you do not think that it does free you from the legal consequences?—I would not act upon the recommendation of an inspector if I saw that he was wrong, but I would back my own opinion.

10144. Mr. *Liddell.*] Are there many complaints in your district of the constitution of coroner's juries?—No, I never heard of one.

10145. It has been suggested that it would be desirable that one-half or some considerable proportion of the jury should be, in all cases, composed of pitmen; what is your opinion upon that point?—I think that the pitmen would not like it themselves, generally speaking, though some of them might; I would have no objection to it myself, not the least.

10146. As a matter of fact are they occasionally employed upon the jury?—They are; we are obliged to have them, or blacksmiths, or joiners; for frequently we have nobody else.

10147. The jurymen are always summoned by the policemen, are they not?—Yes.

10148. Do you think that a good plan, or would you suggest a better?—We cannot suggest a better; the policeman goes to the coroner, and gives him notice that a man has been killed at a certain colliery; the coroner then orders him to summon a jury; there is no other way of getting a jury but by means of the policeman.

10149. The policeman, I suppose, gets hold of the first man he can?—He has his own way, and I have never known of his being interfered with at all.

10150. Have you known cases in which a policeman has exercised anything like partiality in favour of one man over another, or does he go haphazard and take the first man he meets with?—I should think he goes haphazard and takes the first man he meets with.

10151. And practically the juries are composed of shopkeepers, are they not?—Shopkeepers and blacksmiths and joiners and pitmen, and all sorts.

10152. They may have some knowledge of the pit, but in most cases they have none, I suppose?—But it must be borne in mind that all these things are to be decided according to the evidence that is given.

10153. *Chairman.*] The policeman summons the witnesses too, does not he?—Yes.

10154. How does he ascertain the proper witnesses to summon?—The underviewer generally tells him of the people who have been there during the accident.

10155. He may get information also from the workmen interested, may he not?—Yes; it is generally a workman that has to be called to give the evidence about the death.

10156. Mr. *Liddell.*] In regard to accidents, are the accidents in mines mainly caused by a want of skill on the part of the agents, overmen, and chief managers of mines and collieries, and from a lack of diligence or want of care on the part of the subordinate officers?—I think that the majority of accidents are caused from the men's own fault.

10157. By reckless or careless conduct on the part of the workmen, you mean?—Yes, careless conduct.

10158. Reckless in regard to the rules, and in regard to the use of the Davy lamp, I suppose?—Yes, or from the men smoking where they ought not to smoke; or taking the lamp tops off, and exposing the naked lights.

10159. You are now speaking of explosions from firedamp?—Yes.

10160. But there are a great number of other accidents, are there not, and very often fatal accidents, which occur from other causes than these; as, for instance, from a fall of roof?—A fall of roof sometimes happens that nobody can foresee.

10161. In regard to attention to the propping, that, I believe, is the duty of the viewer, is it not?—It is the duty of the deputy overman, or the fireman as you call him, to put up the props.

10162. As the coal is worked out, how is the removal of the props managed?—They are taken out by the deputy overman.

10163. That is a very risky operation, sometimes, is it not?—Yes; the deputy draws the props, and the hewer that has been working in that particular place assists him to take them away.

10164. It is a dangerous operation, however?—Yes, it is a dangerous practice; but it is surprising how well these men can tell in what way the stone is going to fall; I would rather trust my life in their hands than in my own judgment, in that particular case.

10165. Can you state to the Committee what the average amount of fatal accidents is in the collieries with which you are connected?—I cannot state that off hand; but I can tell this, that out of about a thousand people that we have employed at Seaton Delaval, we had but one fatal accident last year, and we then had one fatal accident from that very cause. The deputy went by himself to take the props out, and he was killed. He acted contrary to the rule, by which it is laid down that no man is allowed to take the

props out unless there are two, the deputy and the hewer, there to assist him.

10166. That is a regular rule in the pit?—That is a rule laid down.

10167. A special rule?—Yes, a special rule.

10168. It has been suggested that all the agents, the overmen, and the chief managers of mines, should be subjected to a scientific examination, and should hold certificates of competency, that examination being conducted by some Board of examiners, or by some qualified person; what is your opinion upon that point?—It would be scarcely worth my while to be examined at my age.

10169. Do you think you could pass?—I think I could pass.

10170. But supposing you did not pass, that might be owing to your inability to answer some technical question, or something that was quite new; but it would not be proof positive that you were not perfectly competent to manage the Seaton Delaval colliery, would it?—Well, I think not.

10171. You certainly would object to being subjected to an examination yourself?—Yes, and I would object to all my officers being subjected to an examination; I think I am the fittest man to see whether the officers that I employ in my colliery are fit men or not.

10172. And you consider yourself quite as capable, or more so, of deciding that question, as any Board of Examiners that could be composed?—I consider myself better qualified, because I know the individuals; I know the men, and have known them for years, and therefore I can judge of their capability better than any examiners could.

10173. If these examinations were to be conducted by an independent Board of Examiners, should you as manager of a concern, feel that the responsibility would be very seriously shifted from your shoulders to those of the Board of Examiners?—No doubt of it.

10174. And that would be one inevitable result of this course, would it not?—Yes; besides that, the men themselves would imagine that the viewer had not the control over them; that they did not receive their appointment from the viewer, but that they got it from the Board of Examiners; and they would not be paying that attention to the viewer that they ought to do.

10175. And you, on the other hand, as manager, might have men forced upon you in whom you had little or no confidence; might not that arise?—That might arise, and I would object to that most decidedly.

10176. Then I understand you to prefer, from your long experience in colliery management, that the choice of servants, subordinates, overmen, and the whole class, should be left as now, in the hands of the owner or manager of the colliery?—No question of it; it is the proper way.

10177. Mr. *Foster.*] You stated that accidents generally arose in mines from carelessness on the part of the men; I want to give you an opportunity of qualifying that answer; I presume you referred then chiefly to accidents from explosion?—Yes, I did.

10178. You did not, of course, mean the Committee to infer that miners were not liable to serious accidents from causes over which they could not have control themselves?—Certainly not.

10179. Of course we know that there are serious accidents, from the breaking of chains and the drawing of pulleys, and so on?—Yes; but we have none of those in our neighbourhood, I am glad to say.

10180. They might possibly occur, and do occur?—Yes; and there are other things, such as the roof falling, which no man can foresee.

10181. You did not wish the Committee to understand that every accident that a miner meets with is from his own fault and carelessness?—No, but boys frequently get killed from carelessness; for instance, from leaving a horse and going and playing with other boys.

10182. Sir *Philip Egerton.*] Are there any safety cages used in your district?—I should say not, at least not that I am aware of. I once had them in operation, but I gave them up for this reason—that when you have safety cages, you have to keep constantly watching them for fear of their getting out of order; whereas, when you have no safety cages, you watch the ropes, and you do not allow the ropes to run so long as to break.

10183. Guide-rods in the shafts are used, I suppose?—Yes.

10184. Have you any disconnecting hooks to prevent overwinding?—No.

10185. I see that in Mr. Dunne's report there are some accidents mentioned as having been caused by explosion of gunpowder; is gunpowder used in your district?—Yes.

10186. What tamping rods and prickers do they use?—Iron.

10187. Should not you think copper or bronze an improvement?—I daresay it might be, but we never have such a thing as an accident from a shot going off.

10188. What do you tamp with?—Just the small coal.

10189. That will not strike fire with iron, will it?—No.

10190. Mr. *Woods.*] You seemed to say, I think, that many of the accidents arose from carelessness on the part of the colliers themselves?—Yes, that applies to the boys principally.

10191. Have you had occasion to summon any of them before the magistrate for such carelessness?—For misdemeanor, I have; for instance, about a couple of months ago, I took two before the magistrate for tying a string round a horse's tongue, and nearly cutting it off.

10192. With reference to accidents, have you summoned them; for instance, for smoking or using lucifer matches, or anything of that kind?—I have occasionally had to fine them for smoking; and on one occasion I had a man before the magistrate for firing a shot where nothing but safety lights were used; he went out of his place and got a naked light, contrary to orders, and would persist in firing the shot. A little boy in that case gave capital evidence; he tried to hinder the man, and when the magistrate asked him what the man did, he said, "He took me by the neck and screwed me away."

10193. *Chairman.*] What was done to that man?—He was fined.

10194. How much?—I think some 5*s.*

10195. You appoint the fireman yourself, do you not?—Yes.

10196. What is your principle of selection?—I know

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know all the men upon the colliery, and I know the man that is most suitable to fill that situation, and I offer him the situation.

10197. Do you consider it a promotion when you offer him that?—Yes, he is an officer then.

10198. Does he get more money in the week?—He will perhaps get 27 *s.* or 28 *s.* a week.

10199. That is not more than the average workman's earnings, is it?—No, but he is an officer, and that is a step in the right direction; and then the next move may be to become a back-overman, and then to become a fore-overman.

10200. What would he get in the next move after being a fireman?—He would get 30 *s.* a week.

10201. It is a promotion, you say, and that acts as an inducement to the best men to offer themselves for it?—No doubt of it.

10202. Do you consider it the duty of a manager occasionally to visit the whole mine?—Certainly.

10203. We shall be very glad to hear any suggestion that you have to make as to the working of the Act, or anything you have to say with regard to the evidence which you have heard?—I do not think that there is anything that I can suggest; I think we are going on very quietly; the men are quite satisfied with the weighing machines, and with everything, as far as I know; and I was not aware about the eight-hours question till I came up to London; my men have not said anything to me about the eight hours.

10204. Your conclusion, as I understand, is to leave things as they are?—Yes.

10205. Mr. *Woods.*] Do you think that the working of the present Act is tending to reduce the number of accidents in the mines?—I think so.

10206. It has been given in evidence that some of the worse conducted collieries are being pulled up to the condition of the better conducted, and that the better conducted are improving, is that so?—Yes, previous to the Act I knew some collieries where, though they had no explosive gas, they had a great deal of carbonic acid gas, which is far more injurious to the men's health than the inflammable gas, and I think that those collieries are considerably improved.

10207. By the operation of the Act?—Yes. I wish to make one correction. I said, just now, that there were no women employed. I forgot that at Whitehaven we have about a dozen women employed on the screens picking out the slates before the coals go into the waggons.

10208. Mr. *Foster.*] Would you desire that the Legislature should forbid a woman employing herself in that kind of labour if she were so disposed?—I think if you take such labour as that, there would be no objection to her just standing and picking slates out before the coals go into the waggon.

10209. You would not wish that the Legislature should interfere with that?—Certainly not.

Mr. Edward Potter, called in; and Examined.

Mr. *E. Potter.*

10210. Mr. *Liddell.*] You, I believe, are Vice-President of the North of England Institute of Mining Engineers?—I am.

10211. You are managing partner in the Cramlington and Dudley Collieries in the county of Northumberland, are you not?—Yes.

10212. You employ a large number of persons, I believe; can you state the number?—I think about 1,200 or 1,400.

10213. You have been for a considerable number of years engaged as a manager and viewer of collieries in both the counties of Northumberland and Durham, have you not?—I have for nearly 40 years.

10214. I will first ask you one or two questions in regard to the special point of education, as I believe you have given a good deal of attention to that subject; is the system which is pursued as to providing means of education such as to afford a tolerably ample supply of it?—I think we have three boys' schools and one girls' school upon the colliery.

10215. Can you state the number of children in average attendance on those schools; I am now speaking of day schools?—The average attendance is 355 per day.

10216. Have you any return of the average attendance at the Sunday schools?—At the Sunday schools the average attendance is 317.

10217. These are mixed schools, I suppose?—Yes, general schools.

10218. Are they under Government inspection?—No, they are not.

10219. You prefer to manage those matters yourselves?—Yes, we have never put them under Government inspection yet.

10220. Would you object to state to the Committee your reasons for that?—Of course, to a certain extent, it removes the responsibility; and of course, if you are under Government inspection, you are obliged to have a schoolmaster appointed by the Government, or, at least, examined by the Government, and seeing no advantage in it, we have not adopted it.

10221. You incur the expense, and you undertake the management of the schools yourselves?—Yes.

10222. Do any of the children that have been brought up in your schools go in for examination under the prize scheme?—I do not think that any of them have done so as yet.

10223. So that you have no means of that kind of testing their qualifications, and the results of the education that they have received as compared with other schools?—I have not.

10224. What is your opinion of the effect of not allowing boys to enter a mine until they are 12 years of age; and are you in favour of a legislative prohibition providing that boys shall not enter the mines younger than 12?—Practically, there are very few of them that enter at 10 years of age, but, of course, if you restrict it entirely to boys of the age of 12, it becomes an extra burthen upon the parents. They might object to it, but I do not think that the colliery owners would object to it.

10225. As far as you know, are the provisions of the Act of 1860 complied with by the colliery owners as to the employment of boys under the age

age of 12?—Yes, I think that generally they are.

10226. Do you agree with the tenor of the evidence which you have just heard given by Mr. Forster upon the various matters upon which he has been examined?—I heard all his evidence, and I agree with it.

10227. Is there any special point to which you would wish to refer?—I do not think that there is anything that strikes me at the present moment.

10228. Either in regard to inspection, I mean, or in regard to the general management of collieries?—I think that any increase of inspection might tend to lessen the responsibility upon the manager of the colliery.

10229. And you have no wish to relieve yourself of any share of the responsibility which you at present bear?—No, I think it would be highly dangerous if you made any such appointment.

10230. Mr. *Greenall.*] What is the age of the children in your schools?—They vary from 10 to 15, or younger.

10231. Do they make any weekly payments whatever?—Yes, they pay for their own schooling. The colliery owners provide the schools, and provide the house for the schoolmasters, and provide them with fire-coal, and gardens, and all those perquisites.

10232. What is the weekly payment?—I think it varies from 4 *d.* to 6 *d.* I think the average may be 4 *d.*

10233. The proprietor erects the school?—Yes.

10234. And it maintains itself?—Yes.

10235. General *Dunne.*] How are those schools supported; out of what funds?—They are paid by the parents of the children themselves.

10236. And how is that money collected?—It is delivered to the schoolmaster by the children.

10237. Are any accounts given to the persons who subscribe to it of the application of that fund?—No, it is a matter entirely between the boys and the schoolmaster.

10238. How are the buildings in which the schools are held erected?—They are erected by the owners of the colliery.

10239. At their own expense?—At their own expense entirely.

10240. And the mere payment to the master is by the boys themselves?—Yes.

10241. Is that universal in the district?—That is generally the case, but not without exceptions.

10242. Mr. *Clive.*] You spoke about inspection; do you object to any addition to the inspectors or to sub-inspectors, or to both?—I do not object to any increase of the inspectors if it is found necessary, but I should decidedly object to sub-inspectors; I think that such a system would tend to a general confusion and danger.

10243. You think that they would come meddling?—Yes.

10244. *Chairman.*] Do you agree with the last witness, that if an inspector goes down a mine and makes suggestions to the manager, and the manager acts upon those suggestions, the effect of that is to discharge the manager from responsibility?—It would to a certain extent.

10245. But supposing that the manager does not act upon those suggestions, does not it rather increase his responsibility?—No doubt of it.

10246. Supposing that an inspector goes into a mine and makes a general observation that the ventilation is deficient, that the air ways are not kept sufficiently clear, and that the current of air is not brought sufficiently close to the working faces, and makes other general observations of that kind, do not you think that that greatly increases the responsibility of the manager?—It certainly does; but there is also a provision in the Act for an arbitration, supposing that the manager and the inspector disagree.

10247. Supposing, however, that the inspector does not proceed to put that provision in force, but is content with that general observation, do not you think that the result of that observation on his part would be to induce a careless manager to take more care than he had been taking before?—It might operate in that way, no doubt; if he specifically named any point, it would be the duty of the manager to set it right.

10248. Taking the case of a mine that had not been visited at all by an inspector for four or five years, would you say that you would expect that mine to be better managed than if the inspector had been down three or four times during that period?—If the manager was a conscientious man, he would do his duty whether the inspector was there or not.

10249. Of course, if all managers did their duty, there would be no need of inspection at all; but looking at the managers as they are, should you apprehend that a mine that had not been visited for five years would be better managed than if the inspector had visited it without being called upon merely to see that it was in good order?—A manager who felt his responsibility would no doubt take care to keep it all right whether the inspector came or not; but, no doubt, the thought of an inspector coming would influence him.

10250. You mean, then, that managers are influenced by that consideration?—A proper manager with a sense of duty would keep his mine in a good state whether the inspector came or not.

10251. Supposing we had perfect managers, we should not want inspectors; but, as a fact, do inspectors come without being called upon to visit mines?—They have perfectly liberty to do so.

10252. They have liberty, perhaps, but do they use that liberty?—Yes.

10253. Are you aware that the inspectors have all told us that they never go down the mines without being asked to do so?—The workmen make complaints to them sometimes, and then they go.

10254. You differ then from the inspectors, if the inspectors have stated that it is their practice not to go down the mines unless there is either an accident, or some complaint, or some intimation confidentially given to them that their presence would be desirable?—I do not arrange those matters, but the mines are open to them at all times.

10255. Do you think that in order to make the inspection effectual, it should be the practice of inspectors to visit mines without being summoned?—I think he should.

10256. In what you say you have, as I understand you, assumed that inspectors are in the habit of visiting mines without any special complaints being made to them?—I know that the inspector in our district makes frequent examina-

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tions, but whether or not it is because any information has induced him to do so, I do not know.

10257. You heard what Mr. Forster said as to the difficulty of finding boys enough for two shifts, do you agree with that?—Yes, there is a great scarcity of boys in our district.

10258. Can you account for there being that relative disproportion of boys to men in your district more than in other parts of the country?—I cannot, because the wages paid to the boys are very good, and there are no great number of manufactories in the neighbourhood to prevent their going into the mines. I may say that last year we had some difficulty with our men, and finding the scarcity of boys so great, I applied to the Union Boards of Morpeth and Newcastle, but I could not get boys.

10259. Is it the practice of the Union Boards to send them to collieries?—In some cases they have done so. We stated to the chairmen of the different Boards on that occasion what the wages were, but we did not succeed in getting them.

10260. Do the boards of guardians apprentice them?—In some cases they do.

10261. When they send them to the collieries do they apprentice them?—There is no apprenticeship in the collieries.

10262. What inquiries are made?—In the first place, we made inquiries at the boards of guardians, and if they are satisfied with the wages, and the provision made for the boys, they send them if they are themselves willing to come.

10263. They send them to the manager, and put them under the manager?—Yes, under his charge.

10264. And the manager is then considered responsible for the pauper boys that are sent to him from the union?—Yes. I mention that fact to show that there is a scarcity of boys in the district.

10265. Do not you think that that scarcity may arise from the unwillingness of parents to let their boys be so long in the mine?—I have not heard it stated so; the colliers themselves do not make any objection of that sort.

10266. Mr. *Liddell.*] Will you tell the Committee what is the mode of working coals which is generally adopted in the counties of Northumberland and Durham?—It is worked by what is called the post and stall system, and that was adopted from the great facility we had of ventilating the mine properly. In the long-wall system you have not such command over it as you have in the post and stall, because every part of the mine with us is traversed by the air which, in the long-wall system, you cannot get so effectually done.

10267. Is that mode of working approved of generally by the inspectors?—Yes, I never heard any complaint of it; it is the universal custom of the district, with very few exceptions.

10268. How long has this system of working been in operation?—It has been in operation for centuries.

10269. In fact, it is the old system?—The old system, with certain improvements made in the mode of coursing the air; that is to say, dividing the air, or splitting the air, as it is called in mines.

10270. Is there much done in the way of mechanical appliance for purposes of ventilation in those collieries?—The almost universal plan is to ventilate by furnace ventilation.

10271. Do you know anything about the hydraulic coal-cutting machine?—I have seen it at work.

10272. It is at work at Netherton Colliery at the present moment, is it not?—Yes, I have seen it; not there, but in Yorkshire, and I have one which I think will be at work in eight or ten days.

10273. Then, I need hardly ask you if you approve of the mode in which the machine does its work?—It is very satisfactory.

10274. Am I right in supposing that by that machine the coal is cut with the minimum waste, and of the most marketable shape?—I think it one of the great advantages of the coal-cutting machine, that you can direct the part to be wasted to a particular direction.

10275. Do you consider that the coal-cutting machine is applicable to all seams, to thick seams as well as thin seams?—I think it is more applicable to thin seams, where there is great waste of the coal in cutting it by curving; but I do not think that there are any parts of the seams to which the machine is not applicable.

10276. Have you made any comparison, as you are about to adopt this machine, in regard to the cost of coal cutting, as between the work done by the machine and that done by manual labour?—I do not think there is much difference, judging from the inquiries which I have made.

10277. The advantage of a machine is that the coal is cut more completely, with less waste, and of a more marketable shape, that is to say, larger and rounder?—Yes.

10278. I presume the same amount of labour is required for bringing the coal to bank in the case of the machine being used, as in the case of manual labour?—Quite so; only the mere labourage of filling the coals when it is cut by the machine is infinitely less than it would be under the old plan; the machine is calculated to do the work of 36 or 40 men, so that a less number of men would be required to do the same work that is now done.

10279. In what time?—In the same time.

10280. Is the cost of this machine very great?—No; I think, taking the machine itself, the piping, and so on, it costs from 1,000*l.* to 1,200*l.*; but one forcing hydraulic machine may do the work of three or four of the other machines, which only cost 100*l.* or 125*l.* each.

10281. Is it your opinion that this coal-cutting machine will come into extensive use?—I believe it will.

10282. *Chairman.*] Do you conceive that the effect of this machine would be to make the labour of boys unnecessary to any degree?—I do not think it would affect the labour of boys at all; the same amount of putting, and driving, and trapping, would be required; the machine merely affects the hewing; it would be a great saving to the mine.

10283. If the coal were in larger bits, it would require more labour to cut it, I presume?—No; by the ton I do not suppose that it would make any difference, but you would get a larger quantity of round marketable coal than by the other means.

10284. Mr. *Clive.*] Would it displace any amount of labour?—Yes, it would of the hewing labour; because the attendance upon the machine only requires one man and one boy.

10285. Mr. *Greenall.*] If you had such a machine as that, you would be much less helpless in the case of strikes, I presume?—Yes, and no doubt

doubt that consideration led to its being resorted to. The difficulty in that respect has been so great of late years that we have been glad to find anything that could make us more independent of strikes.

10286. *Chairman.*] When you applied for boys under 12 years of age from the workhouse, did you get them?—I applied for boys above that age, but I did not succeed.

10287. Would you have taken them under that age, if they had offered them?—No.

10288. Your application, as I understand you, was for boys above the age of 12, in that case?—Yes.

10289. Is there anything else you would like to say with reference to the subject of your examination, or with regard to our inquiry generally?—I do not think there is anything.

10290. Mr. *Liddell.*] Have you any particular view to express about the constitution of the juries?—I can only say that the custom has been in our collieries for many years to take the juries indiscriminately, and I never knew a case where there were not three, four, or five coal-hewers on the jury; in that respect it is perfectly open. Of course, if you made it imperative to have any number of colliers on the jury, it would be necessary to restrict the number. You might have men on the jury who, rightly or wrongly, would give a verdict against the evidence.

10291. Do you agree with the last witness in the opinion which he has expressed against boards of examiners and examinations for men employed in the collieries for overmen and agents, and other subordinate officers?—I think it is due to the manager of the colliery to have the appointment exclusively of all his sub-agents, otherwise he would not have a proper amount of control over them; if they knew they were to be appointed by other people they might set the empoyer at defiance.

10292. Mr. *Greenall.*] In the collieries with which you are connected, is the propping and the removing of the props carried on in the same way as the last witness described?—Yes, in the same way; there are a set of men called the deputy overmen, who draw these props, and who take the greater care to prevent accidents but sometimes they do occur.

10293. *Chairman.*] Have you anything which you wish to add to Mr. Forster's evidence on that subject?—No.

10294. Is the object of removing the props to save the wood, or is it to let the roof come down?—Both objects are kept in view. If you allow the props to stand, then, as the pressure upon them is great, they get broken and other damage is done, whereas if you allow the roof to come down it is done with at once.

10295. Then it is not so much out of economy as to let the roof down, that the props are removed?—That is so.

10296. Mr. *Liddell.*] Have the collieries under your management been tolerably free from accident?—I think on the whole very free; I may perhaps state that a return was made a few years ago to the Crown from the coal trade, by which it appeared that there was only one accident to 20,000,000 tons of coal that were worked over a period of five or six years in those two counties of Northumberland and Durham.

10297. Mr. *Foster.*] Would you recommend that the Legislature should prescribe that the working of coal should be carried on by weight in every district, or would you leave it to be settled by the custom of such districts, between the masters and their men?—I think it would be better for it to be settled by custom; it would be a great hardship upon those districts which do not now use weight to have that system forced on them if the other worked satisfactorily between the master and the man; it has been the custom in our district to work exclusively by weight; we weigh every tub and have done so for 20 years.

10298. *Chairman.*] You say that if the system in force acts satisfactorily to master and men, you would not interfere with it?—No.

10299. If it is a cause of frequent dissatisfaction and disagreement, that might alter your opinion, I presume?—It would; but in our district we have had few or no disputes of that kind.

10300. Mr. *Foster.*] Would you say that you wish the Legislature to lay down the nature of the contract between master and men, in such a way that it should apply equally to all coal mines?—Certainly not.

10301. *Chairman.*] Can you give any reason, from your knowledge of other districts, why the measuring system should be good in one, and the weighing in another?—No, I do not think I can; formerly we went altogether by measure, and we had very frequent disputes with the men, which was always a very unpleasant thing; ultimately we put up a machine to weigh every tub.

10302. Then you adopted the weighing system, to put an end to the frequent disputes that arose out of the measuring system?—Yes.

10303. Mr. *Greenall.*] You have a strong objection, as I understand you, to legislation, insisting that coal shall only be got by weight?—I think that would be unfair upon those parties who use the other system.

10304. *Chairman.*] In what way would it be unfair?—It would be compelling them to change the custom altogether, and they might have a great deal of difficulty before they got the terms and prices settled between the employers and the employed.

10305. You mean that the passage from one system to another would involve a good deal of trouble?—And a good deal of expense also.

10306. A good deal of expense, in what way?—In putting up the weighing machines, and employing parties to attend them, and also in the keeping of the accounts.

10307. Do you think that it would increase the trouble of keeping the accounts?—I think it would; we require to have a man to make out a tabular statement every day.

10308. You have been concerned in both systems, have you not?—Yes.

10309. And you say that the weighing system involves more trouble than the measuring system?—Decidedly; but it is more correct, I think.

10310. Now that it is fully in operation, do you still think that it gives more trouble?—It gives a good deal of trouble.

10311. But in spite of the additional trouble which it has entailed upon you, you think it a change for the better, as I understand you?—We are satisfied with the change, and would not wish to alter it.

10312. And you can give no reason why, if the weighing is better for you, it should not be better for other districts also?—They would object to it, because it would be a novelty.

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10313. Mr. *Woods.*] What is the weight of your tubs in Northumberland generally?—Our standard weight is nine cwt., and a tub very frequently amounts to 10 cwt.

10314. Your mines are thick seams?—Yes.

10315. But supposing your seams were very thin, would your tubs be as heavy?—In that case you must make the tubs to suit the seam; we have two kinds of tubs now.

10316. If the tubs were much lighter it would be more troublesome to weigh them?—Yes, because there would be more of them.

10317. Then, in the thin seams, speaking generally, the weighing system would be more troublesome and expensive than in thick ones?—Decidedly, because there would be more weighing.

10318. With regard to the responsibility of inspectors, when the Chairman asked you whether you thought that in case of any recommendation being made by an inspector, and not being attended to, it would not increase the responsibility of the manager or owner of the mine, you said that you thought it would?—Certainly, if any accident occurred afterwards in consequence of his non-attention to that recommendation, it would.

10319. But would a recommendation of the inspector remove any responsibility?—I do not see that.

10320. You have already said that it might increase it, but in case an explosion occurred, where there had been no such recommendation, would that relieve the manager of the mine from any legal responsibility?—You mean, I presume, if the inspector had made no complaint or had passed the mine as safe at the time.

10321. Yes?—If he passed the mine it would relieve the manager certainly of any responsibility.

10322. Legally?—I think so.

Mr. John Taylor, called in; and Examined.

Mr. *J. Taylor.*

10323. Mr. *Liddell.*] You are managing partner, I believe, of the Ryhope Colliery, in the county of Durham?—Yes.

10324. And also owner and consulting viewer of several other collieries in Northumberland and Durham?—Yes.

10325. And mining engineer to the Duke of Northumberland's mines?—Yes.

10326. And also to Lord Barrington's?—Yes.

10327. With regard to the subject of education, I believe, you have given a good deal of attention to that; will you state the means of education which are afforded at Ryhope Colliery?—At Ryhope Colliery we have two large schools, which cost about 1,200*l.*, each capable of holding about 200 children.

10328. What is the average attendance?—About 130 in each school.

10329. Boys and girls?—Yes, they are separate schools.

10330. What is the annual cost of maintaining those schools?—Altogether nearly 150*l.* a year.

10331. Are you under Government inspection?—We are not.

10332. What would be the effect, in your opinion, of prohibiting boys from entering the mines until they had reached the age of 12; that is to say, prohibiting the employment of boys under 12?—At present there is a very great scarcity of boys in the county of Durham, generally speaking, and I may illustrate that by stating that, whereas in Northumberland (to which county more especially the evidence of the preceding witnesses referred) there is only one boy required to three and a half hewers on the average, in Durham one boy is required to two hewers.

10333. That is, I presume, from the softer quality of the coal in Durham, owing to which a greater quantity can be cut?—Yes.

10334. I understand you to say that in Northumberland one boy will do the work furnished by three and a half hewers, and in Durham one boy is required for every two hewers?—Yes, that is the case on the average.

10335. Therefore, am I right in supposing that the coal workers of the county of Durham could not do without the employment of boys under the age of 12, that is to say, between 12 and 10 years of age?—I think they could not; even at present, when these boys are employed between the age of 10 and 12, we have a scarcity, and of course that scarcity would be very materially increased if these boys were prevented from working.

10336. In the case of a boy under the age of 12 applying for employment, are you particular in inquiring for a certificate?—We always inquire whether the boy can read and write, and get the certificate.

10337. And therefore, as far as you know, the Act is complied with strictly?—It is.

10338. We have heard a good deal about a double shift of boys, will you tell the Committee your opinion upon that point?—I think that it would be utterly impracticable to have that system adopted, because, even at present, with single shifts of boys, we have a scarcity in the supply, and of course we should require double the number if we had double shifts; therefore it could not work at all in my opinion.

10339. Do you agree with what Mr. Forster stated, that even supposing you could get the boys, the whole working of the pit would have to be suspended for a very considerable period, and that great inconvenience and consequent cost would have to be incurred in order to enable the second shift of boys to reach their place of work?—I agree with that.

10340. In your opinion are the accidents that unfortunately occur mainly caused by want of skill in the agent, overmen, and managers, or from a lack of diligence and want of care on the part of the subordinate officers?—I think that the great bulk of them arise from causes over which no one has any control, and there may be others resulting from carelessness.

10341. What is your opinion as to requiring all the officers of a pit to be subjected to an examination, and to obtain in that way certificates of competency for their employment?—I do not think that that system would work so well as the present; I think that our mode of examining them, and the thorough knowledge which we have of them, are very much better than any other possible examination could be.

10342. Then I understand you to agree entirely with the opinions that have been expressed by

by the two former witnesses upon that point?—I do.

10343. In regard to wages, the same custom, I believe, prevails in the county of Durham in regard to fortnightly pays as in Northumberland?—The same custom as in Northumberland.

10344. Is it your opinion that it would be desirable to change that system and pay by the week?—I think not.

10345. Do you forsee the same results as Mr. Forster described in his evidence?—Precisely so; I have no doubt whatever that such would be the results.

10346. Mr. *Vivian.*] I believe it is the common practice to weigh at the pit's mouth in Durham?—That is the practice in Durham and in Northumberland.

10347. And no difficulty arises from it?—None whatever; it has been a long continued practice with us, and we find that it answers the purpose.

10348. Mr. *Foster.*] Would you recommend that the Legislature should lay down a rule that that should be the mode of payment, and no other under any circumstances?—No, I would not; I think that great attention should be paid to the particular custom in the district; I think there may be circumstances in a particular district which may render measure superior to weight.

10349. Mr. *Woods.*] Is the plan of the wages being paid fortnightly found to be a convenient plan, partly because it is recognised as being desirable for men who work underground to have decided play days?—Yes.

10350. And is another reason this, that for the sake of the repairs that go on in the winding apparatus, there should be days when there is no work done at all in the pit?—Yes.

10351. And that is better for the effective days?—Yes.

10352. If you had partial winding going on every day in the week, those repairs could not be so advantageously effected?—No, we find that the one day in the fortnight is sufficient to keep the machinery in good order.

10353. And in practice, that day is used for that purpose?—Yes.

10354. *Chairman.*] Could you suggest any reason why in some districts the practice of paying by measure should be better than the practice of paying by weight?—It would depend upon the custom.

10355. Supposing that there was no custom, but that you were opening mines in a new district, can you give any reason why in some districts you should adopt the system of paying by weight, and in other districts you should adopt the system of paying by measure?—One great reason is this; supposing you had a wet mine, I think that measure would be a much fairer principle than weight in that case.

10356. Why do you think it a fairer principle in that case?—Because it would occur that a man would fill his coals wet, and, if wet, they would weigh considerably more than dry coals.

10357. Mr. *Liddell.*] Is it not the case, that the one instance in the county of Durham, in which measurement is adopted, is a case of a very wet mine?—I believe it is so.

10358. Is that the reason why the principle was adopted in that case?—If I can speak from the statement of Mr. Douglas, the viewer, he told me so himself.

10359. *Chairman.*] Do you know of any other reasons, except wetness in a mine, why measuring should be preferable to weighing?—It may depend in a great measure on how the contract has been formed with the landlord, and on many other circumstances.

10360. The payment to the landlord is always by weight, is it not?—Not always; in some cases it is by the acre; in Lancashire, for instance.

10361. Is there any case in which the payment to the landlord is by measure?—There is none in the north country; my principal exception would be in a case of a wet mine; I think in that case measure is a fairer principle than weight.

10362. Mr. *Foster.*] Whether fairer or not, whether better or worse, would you as a general principle, give it as your opinion, that the Legislature should lay down the nature of the contract that should subsist between the masters and the men for working coal, and which should apply to all coal mines?—I think not.

10363. Mr. *Greenall.*] I think in Lancashire, the practice is almost universal to pay landlords by the acre?—It is.

10364. *Chairman.*] What work of the boys is there that could be done by men, if you could not find boys?—Men could not drive because they are too tall, and would get their heads knocked; they could not very well put, that is to say, bring the coal from the face where the men are working to the station, where the horses take it away; because the same reason applies, that is to say, they are too tall. They certainly might keep the doors, but I do not think they could do anything else.

10365. Are your mines thin seams or thick?—They are both, varying from 4½ to 6 feet.

10366. In a mine, with thick seams, the men could put and drive, could not they?—The great bulk of the seams in Durham do not exceed 4½ feet.

10367. Do you think that a man could not, by stooping, do such work in those mines?—I think he would very soon tire of it.

10368. Did you hear the question which I put about inspectors to the previous witness?—I did.

10369. Do you think that the responsibility of a manager would be diminished by an inspector going down into a mine, and telling him that it was not in a satisfactory state?—No, I think not; because the manager has the option of refusing the advice.

10370. Are you aware of the fact that the inspectors do not usually visit mines, except upon a special application or complaint?—Men working under me have frequently sent for the inspector entirely unknown to myself.

10371. But are you aware that it is the practice of the inspectors not to go down into the mines unless they are sent for?—I believe it is so.

10372. Do you think that a good practice?—Well, hitherto the accidents have been very few indeed, and that is the best proof of how it is working.

10373. That is in the district which you are connected with?—Yes.

10374. There have been more accidents in other districts, I believe?—I believe there have.

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10375. Should you say that if a mine had never been visited for three or four years that mine was likely to be in a better state than if the inspector had visited it several times in that period?—It is so strongly to the interest of the proprietor to keep the mines right and in the safest possible condition, that I think that inducement alone is sufficient without the inspector being there.

10376. That argument goes against the appointment of inspectors altogether, does it not?—I do not deny that the inspectors act as a sort of check upon the parties, and do good in that respect.

10377. Do you think that, assuming that there are to be inspectors, it is part of the duty of the inspectors to visit mines occasionally without being sent for?—I think they should.

10378. You think that the inspector would not be effectual unless they made that part of their duty?—I think so.

10379. Supposing that to be part of their duty, do you conceive that there are inspectors enough to perform it?—I do think so, that is to say, for inspectors to come when sent for by men or by the managers, or by whomsoever they might be sent for.

10380. How many collieries are there in your inspector's district?—A very large number; I forget the exact number at present.

10381. Would it be possible for the inspector to visit them all in the course of the year?—It may happen that a great number of these collieries have not inflammable gas in them.

10382. But those that have not inflammable gas have the other sort of gas, have they not?—Generally speaking they have.

10383. You have hardly answered my question, whether, knowing what you do of the number of collieries in your district (without saying what that number is) it would be possible for the inspector in the course of the year to visit and inspect all the collieries in the district confided to him?—I do not think it would be possible for him to inspect and examine the workings.

10384. Did you hear the question which I put to a previous witness, about the knowlege which an inspector might gain of a colliery, not by visiting every part, but by going down and seeing what the general system of working the colliery was, and taking by chance, perhaps, one working place?—Yes.

10385. Do you agree that an inspector might acquire useful knowledge of a colliery in that way?—I think he might.

10386. And you would think it desirable, as I gather, that inspectors should make such visits?—I think it desirable to have the mines examined; no question of it.

10387. Mr. *Clive.*] Are you aware of the system pursued in factories?—I do not know much about it.

10388. Have you heard that the factory inspector does visit the factories regularly?—I have heard that.

10389. Are you aware of any distinction between the visiting of mines and the visiting of factories?—I think that the practice of the mining inspector coming unawares as he does is much better than the other system, because he comes upon us unprepared, and but for that it is possible that we might have matters so arranged that if anything had been wrong, I do not mean to say that anything would be wrong, it might be in good order by the time he came.

10390. You think that unexpected visits are desirable?—I do.

10391. Mr. *Vivian.*] Do not you think that if inspectors visited mines too frequently, and made many suggestions as to the working of those mines, they would take the responsibility off the shoulders of the owners of those mines?—Undoubtedly they would.

10392. Do you think it desirable that Government should take that responsibility upon itself?—I think not; I think that it should be left to the owners of the mines.

10393. It would be quite impossible, would it not, to adopt the suggestions of inspectors, and still to hold the managers of the mines responsible for suggestions made by the inspectors?—No doubt of that.

10394. The person who made the suggestion must necessarily be responsible for it?—No doubt of it.

10395. Mr. *Liddell.*] In the county of Durham, with which you are acquainted, are the thin seams worked in connection with the thick seams for the most part, or are they left unworked?—They are left unworked till the thick seams are worked out.

10396. Then probably I am right in supposing that for the most part the thin seams are unworked?—Yes.

10397. Is it your opinion that in the event of the thick seams being worked out, the thin seams can then be profitably worked, having abandoned former workings?—It would depend a great deal upon the thickness. I have no doubt that the time will come when a 2 or 2½ feet seam will be worked.

10398. Would not there be practical difficulties, and no inconsiderable amount of danger in going back to the old system?—I do not see that. There may be water in the seam above which has been worked, but that might be pumped out again.

10399. Then, you do not see any practical difficulties in working the thin seams some future day when it may be necessary to do so?—No, I do not. It will be many hundreds of years before that subject need be considered.

10400. Mr. *Greenall.*] Have you seen the coal-cutting machine?—I have not paid much attention to it.

Mr. John Daglish, called in; and Examined.

Mr. *J. Daglish.*

10401. Mr. *Liddell.*] I believe that you are manager of Earl Vane's collieries in the county of Durham?—Yes, I am.

10402. They are very extensive are they not?—They employ a large number of men.

10403. Could you state the number of tons that they raise per day?—About 3,500.

10404. What is the number of men that they employ?—About 2,000 at the pits alone, men and boys.

10405. What is the proportion of boys to men in that number?—In the case of the hewers, the actual getters of the coal, there is one boy to two men.

10406. Altogether you employ something like 3,000 people I believe,?—Yes; about 500 being boys.

10407. In

10407. In regard to boys, what are the means of education that you afford?—There are seven schools with 12 masters and mistresses, belonging to Earl Vane.

10408. And the average attendance is what?—I have not the exact number, but it is about 150 at each school.

10409. Do you agree with the former witnesses as to the difficulties that would be experienced in finding boys for the work, if their hours of labour were shortened, or if they were prohibited by law from entering the pits below the age of 12?—It would be quite impossible that we could raise our present quantity of coal if the hours of the boys were shortened, because already we suffer under a scarcity of boys.

10410. You are entirely of opinion that you could not get an increased supply of boys, do what you would?—Yes.

10411. Are the boys in the county of Durham drawn off from employment in the pits by finding ready occupation in other branches of trade?—No; we absorb in the pit all the boys that are available at present.

10412. Have you ever applied to the Board of Guardians for boys?—No.

10413. What is your opinion with regard to the plan of a second shift of boys, could that be carried out as far as the practical objections to it go?—It is possible, but would be attended with very great difficulty.

13414. It would derange very materially the action of the pit?—Very much so; it would stop the work, and it would be attended by very considerable danger to the boys themselves.

10415. Should you be favourable to the appointment of sub-inspectors to work under the inspectors for purposes of examination of the collieries?—Unless they were men of at least equal attainments with the present inspectors their appointment would lead to constant bickering, and I cannot see what use they would be; I am totally opposed to the appointment of sub-inspectors.

10416. Then you would object to the appointment of any persons as inspectors of an inferior class to the present inspectors?—Entirely.

10417. And of course I need not ask you whether if they were of the same class that would be a question for the State to decide, and a question of expense also?—Even then that would be adding to the number of the inspectors, and if you increase the inspection you decrease the responsibility of the managers.

10418. Then I understand you to be unfavourable to any greater amount of inspection than that which is carried on at present?—The present inspection seems to work very favourably.

10419. Do you think that Mr. Atkinson's district, considering the number of collieries placed under his view, is so large that he is unable to accomplish those duties satisfactorily and fully?—I think he accomplishes them fully.

10420. Do you think that accidents in the mines in your district arise from want of skill in the persons employed, in the shape of officers of the pits or from other causes over which it is difficult to have control?—From the latter; I think that the majority of accidents arises from causes over which no legislation can have any control, and which no care can prevent; I think, however, that many of them arise from the carelessness of the workmen themselves, because they are accustomed to danger and they are not sufficiently watchful; and I consider that, certainly in the northern districts, the subordinate officers of the mines are a very superior class, very careful, very attentive, and fully competent to perform their duties.

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10421. And as an experienced man, and one very much connected with the management of collieries, do you wish to retain the appointment of your subordinate officers in your own hands?—Most certainly.

10422. You would object very much to their being appointed by examination by a Board, for instance, or by any method of that kind?—I think that if any appointment was made in any of the mines under my management, other than the men employed by myself, I would be obliged to send a man to look after the men so appointed.

10423. You would be obliged, in fact, to have a system of inspection on your own account?—Quite so.

10424. Do you agree with the evidence which has been given to the Committee on the various subjects before them, by the three previous witnesses?—I do in great part.

10425. Are there any special subjects on which you wish to give evidence?—I think that with regard to the system of weighing it would be difficult to enforce it entirely in all districts; I think that much depends upon the nature of the coal, and the manner in which it is worked, and in some districts where the work is divided into two portions, it would be impossible to pay by weight entirely.

10426. Then you wish to leave those contracts between master and men to be decided by mutual agreement and the custom of the county?—Quite so.

10427. *Chairman.*] You have not been concerned in the management of other collieries, have you?—Yes, I was the manager of the Hetton Collieries for five years.

10428. As far as you have been concerned, have the requirements of the Act, with regard to maps, been attended to?—In all respects the requirements of the Act are complied with, and that requirement about the maps is too important a subject for the mine owners and managers to neglect.

10429. In a well-managed mine, they would be sure to comply with that regulation, you mean?—Yes.

Mr. Anthony Davidson, called in; and Examined.

10430. Mr. *Liddell.*] You are a medical man, I believe?—Yes.

10431. And you are surgeon to the following collieries: Buradon, Dudley, Cramlington, Seaton Delaval, Seghill, Cowpen, Bebside, Choppington, and North Seaton?—Yes.

10432. They are all situated in the same district, are not they?—Yes, all in Northumberland.

Mr. *A. Davidson.*

10433. You have a very large number of working men and boys, I believe, under your general charge?—Yes.

10434. What number?—About 6,000.

10435. Have

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10435. Have you an assistant at each of the collieries?—Yes; I have five assistants stationed at different parts where they are required.

10436. And you take the general charge of the whole?—Yes, I take the general charge of the whole.

10437. How long have you been a medical practitioner in that district?—I have been for 33 years in the district as an assistant and general practitioner; I was five years an assistant.

10438. Have you always been connected with the colliery practice?—Always connected with the colliery practice.

10439. Is it your opinion that the employment of boys in pits is prejudicial, having regard to their health?—I do not consider that it is prejudicial in well-ventilated pits.

10440. Are those nine pits over which you now exercise general medical superintendence well ventilated?—Judging from the state that the boys and the men are in, I think they are well ventilated.

10441. Is it your opinion that the boys' health does not suffer in those pits?—I am not aware that it does.

10442. Does their work in any way affect their growth?—No, the colliers there are of the average height of the men in our neighbourhood; they are very athletic and fond of different sports; playing quoits, and boating, and running. I am told that they beat almost everybody else at those things.

10443. Are they liable to chest affections?—They have been more so than they are now.

10444. Have you ever taken the trouble, with regard to the prevalence of chest affections, to compare the population with which you are connected with any other population?—I have not made any statistical report on that subject, but I judge from my experience in my practice every day that they are not more liable than other people are to such affections.

10445. As a matter of fact, have you many cases of consumption or lung disease to attend to?—I have a table here of the cases of death which have occurred, and which I will put in.

10446. That table is not compared with any other?—No, but you might compare it with the reports of deaths in other districts, or in other countries.

10447. Are the boys well fed and clothed in your district?—Very well fed, I think.

10448. Have you anything to say as to the sanitary regulations of the colliers' dwellings; are their dwellings clean for the most part?—The pit women are remarkably clean people, and the houses are very well ventilated; they have large fires, which are the means of ventilating the houses very well.

10449. Are there gardens attached to their dwellings?—Yes, in all cases, that is to say, they are across the road, perhaps, not actually attached to the house.

10450. As a matter of practice, are there gardens belonging to their houses generally?—Yes, in all cases that I am aware of.

10451. Have you observed a marked contrast between the boys as they are now and what they were some 20 years past?—A very great improvement.

10452. Owing to what?—I suppose owing to the improved management in the mines, owing to food being cheaper and owing to improvement in every respect. They are better educated, and there is more attention paid to them generally.

10453. But you attribute that improvement in a great degree to the improved ventilation, do not you?—Yes; when I spoke of the improved management of the mines I meant improvement in ventilation.

10454. You have, no doubt, often observed these boys when they come off work; do they look tired?—They look very merry generally.

10455. Do they look much depressed?—No.

10456. Do they look pale from exhaustion?—No, they look pale from being out of the sun, but not from exhaustion.

10457. The natural colour of a pit boy is pale and blanched?—Yes, you can imagine that it would be so from his being out of the sun.

10458. Do they go in a good deal for bowling and racing?—Yes, for bowling and running.

10459. After they come from their work?—No, I do not know that they go bowling after they come from work, but they amuse themselves in various ways in running home.

10460. On play-days these amusements are practised, I suppose?—Yes, very much.

10461. They have an objection to attending school in summer, have they not?—They do not go to evening school in summer.

10462. Why do they not?—They like to get out into the fresh air, I suppose.

10463. The attendance at school is much better in the winter, as I gather from you?—Yes; the night schools do not open in summer, I believe; at least I am not aware of any that do.

10464. The night schools are well attended in winter, are they not?—Pretty well, I believe.

10465. As to the men, have you observed any physical defects in the men resulting from their occupation?—No, I have not.

10466. No traces of disease contracted early in life?—No, I am not aware of any.

10467. Have you observed, on the part of young men who are anxious to get into the more lucrative employment of hewers, that that, occasionally, is too great a strain for them?—Yes, I have observed young men hurt themselves by going to hew too early; it is too great a strain on their muscles, and they injure themselves by doing it.

10468. And not unfrequently they injure themselves from over-work, do they not?—Yes, from being anxious to work as much as older men do.

10469. Have you not known instances in which in the event of a man's marrow (as his partner in the working face is called in that country) being laid off work, the second man will work double time?—I have known that very often.

10470. That is very likely to injure a man's health, is it not?—I am not aware of that; but I have known them exhausted from stopping in two shifts.

10471. Are the insurance offices willing to insure the lives of colliers?—They canvass them now; when I first became connected with the coal trade, the insurance companies would not take the pitmen; scarcely a man that went down a pit belonged to any society, but now, different societies, such as the Foresters and Odd Fellows, and the insurance companies, give them the full benefit.

10472. As a matter of fact, a considerable number of these men do insure their lives now, do they not?—A good many of them go into an insurance

surance society a good many into funds, and a good many into the Odd Fellows and Foresters.

10473. Do you know whether the insurance companies take them at the same rate as they would other workmen?—I cannot answer that question; the societies of the Odd Fellows and the Foresters do, but I cannot say about the insurance companies.

10474. You do not know whether they ask a larger premium?—I never heard to the contrary, but I never asked the question.

10475. As to the habits of the people, have you observed a great and satisfactory change in that respect within the last 20 years?—Yes, there is a great improvement in the habits of the people.

10476. Will you tell the Committee in what respect there is an improvement?—They are better educated and better behaved; the men are very good husbands and very domesticated in their habits, barring a very bad tendency which has got among them, to what they call schooling, that is to say, "gambling" with pitch and toss, which was introduced from the West Country.

10477. Are you referring to any particular kind of gambling?—To plain pitch and toss; tossing halfpennies.

10478. They bet a good deal, do they not, besides?—Yes, some of them.

10479. Mr. *Vivian.*] From what west country was that gambling introduced?—From the Whitehaven district; some Whitehaven man brought it down to us, and it spread very much.

10480. Mr. *Liddell.*] You have some tabular statements, I think, in regard to the deaths among the mining population in your district?—I have a tabular statement of the causes of death of 282 people in one colliery district; I have one statement showing the ages they died at, and another showing the causes of death. These tables apply to one district containing three collieries.

[*The Tables were handed in, and are as follows:*]

TABLE A.

STATEMENT showing the Number of Deaths from all causes during the Two Years 1864 and part of 1865, at the Collieries of Seaton Delaval, Seghill, and Bebside, Northumberland, in a population of about 6,000 people, about one-tenth of this number being employed in Agricultural purposes, the remainder all employed in or about Collieries.

Children below 5 years of age -	146	
From 5 to 10 - - - -	12	
		158
„ 10 to 15 - - - -	9	
„ 15 to 20 - - - -	14	
		23
„ 20 to 30 - - - -	26	
„ 30 to 40 - - - -	16	
„ 40 to 50 - - - -	9	
„ 50 to 70 - - - -	26	
„ 70 to 80 - - - -	14	
„ 80 to 90 - - - -	9	
Upwards of 90 - - - -	1	
		101
TOTAL - - -		282

101 persons above the age of 20 years, in near two years: under one per cent. per annum.

23 young people: under a quarter per cent. per annum.

TABLE B.

CAUSES of DEATH of 282 Persons at Bibside, Seaton Delaval, and Seghill Collieries, Northumberland, in a Population of about 6,500 persons.

Accidents in mine - - - -	13
Accidents on waggon way - - -	3
Accident - - - - - -	1
Burns and scalds - - - - -	3
Liver, abscess of - - - - -	1
Inflammation of bowels - - -	14
Small-pox - - - - - -	14
Debility - - - - - -	31
Gastric fever - - - - -	2
Diptheria - - - - - -	1
Fevers, typhoid and continued - -	14
Disease of heart - - - - -	12
Dropsy - - - - - -	6
Bronchitis - - - - - -	13
Mesenteric disease - - - -	18
Consumption - - - - -	29
Water in brain - - - - -	3
Convulsions - - - - -	12
Old age - - - - - -	24
Convulsions after labour - - -	1
Infantile fever - - - - -	17
Cancer of womb - - - - -	2
Whooping cough - - - -	2
Disease of liver - - - - -	2
General dropsy - - - - -	3
Abortion - - - - - -	1
Congestion of lungs - - - -	2
Diarrhœa - - - - - -	8
Apoplexy - - - - - -	2
Disease of kidneys - - - -	2
Inflammation of brain - - - -	6
Cancer - - - - - -	1
Hemorrhage - - - - -	1
Ulceration of bowels - - - -	1
Teething - - - - - -	3
Disease of bladder - - - -	1
Croup - - - - - -	3
Inflammation of lungs - - - -	10
Injury to genitals - - - -	1
TOTAL - - -	282

10481. Mr. *Woods.*] Were there no other deaths in the district but those?—Not that I am aware of.

10482. Mr. *Greenall.*] Of course, you go a good deal into the cottages of the miners?—Yes, a good deal.

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10483. What kind of cooks do you suppose their wives to be in general?—Their houses are in beautiful order.

10484. I am alluding to the cookery at this moment. Very much of the comfort of a working man depends upon the way in which his food is cooked, I suppose?—Yes; I do not think that any people are to be found more comfortable or cleanly in their habits than the colliers' wives, and I believe that as a general rule they cook very well; some of them are young, and have to acquire of that, course.

10485. But, as a class, you think them comfortable, and well off?—Yes, as a class, they are above a good many others. You would be delighted to see their houses in the evening. We get some very dirty people from other parts. I have been speaking of the Northumberland pitmen, but there are others who come into the district that I cannot speak so highly of.

10486. Mr. *Clive.*] With regard to the effect of the black damp, or carbonic acid gas upon the men, what have you to state to the Committee?—We have not anything of that in our district. I have had some cases of men that have come from Scotland who have been suffering from the effects of it.

10487. Is it not the case that, after an accident, as a general rule, there is a great deal of carbonic acid gas?—Yes.

10488. And is it not the case that a great many of the deaths which apparently result from the accident, in reality result from carbonic acid gas?—No, not many of them, I think.

10489. Are not men often choked at that time?—If they are not got out of the way they must be, but it is difficult to tell whether the death has been caused by explosion, or by being choked.

10490. Mr. *Vivian.*] But you can see whether they are burnt or not?—That is the only way in which you can tell.

10491. There is no difficulty about it, is there; you can always tell whether a man has been burnt or choked?—As a general rule you can.

10492. *Chairman.*] I understood you to say that among the collieries which you visit there are none liable to carbonic acid gas; they are all explosive collieries, I suppose?—No, they are not explosive collieries; Burraden is an explosive colliery, also Heghill, and Dudley, some of the other collieries also have gas coming off; but the others are not.

10493. Are not the men liable to suffer from carbonic acid gas; I do not mean from the choke damp that follows explosion, but from the presence of carbonic acid gas in the colliery?—No, I have not experienced much of that.

10494. You have been 33 years in the district, I think you have stated?—I have been 33 years in the district.

10495. So that you have not had much opportunity of comparing the health of boys in that district with the health of other boys, I presume?—Except agricultural boys.

10496. As compared with agricultural boys, how do they stand in respect of health?—I think that they bear comparison with agricultural boys; but you will notice in the statement which I have put in, a most unfortunate number of deaths of young children of a very tender age.

10497. How do you account for that fact?—I imagine that it is owing to the want of cow milk; these little children are fed too much upon coffee and stimulating food.

10498. It is an unusual proportion, as I understand you, of deaths of young children?—It is a large proportion, and I think that it is attributable to the want of cow milk, as I have said; as you get away into the country where there is cow milk, the number of deaths of children of that age decreases.

10499. Have you any other observation to make upon these tables which you have put in?—That is the principal observation which I wished to make.

10500. What is the age at which the men habitually cease to work in the mines?—I knew a man who gave over work a short time ago at 73 years of age.

10501. Is not that very unusual?—No, it is not very unusual, I think.

10502. At what age do they generally leave off work?—It depends upon the constitution of the man. The man of whom I have just spoken gave up hewing a little earlier.

10503. At what age do they give up the hard work generally?—I have known men hew for 40 years.

10504. That is an unusual length of time, is it not?—I think that there are plenty who hew for 30 years.

10505. At what age do they begin?—They ought not to begin before they are 20 years old, but many of them begin at 17.

10506. And you have said already that they hurt themselves by beginning too young?—Yes.

10507. Can you name those insurance companies that you said were willing to insure the lives of the pitmen?—The Provident Company is one.

10508. Have any of the leading companies been willing to do it, or was it some of the small companies?—I do not know as to that.

10509. Have these companies been successful that have insured the miners?—They generally pay them pretty well. I believe there have been some amongst them that have not been very creditable ones, but I leave to my assistants the duty of making the reports to the benefit societies.

10510. You said that the stature of the miners was about the average, did you not?—It is about the average.

10511. But the average height of the men in the north country is considerably above the average elsewhere, is it not?—Amongst the hills it is, but not in the flat country.

10512. You mean that the stature of the miners is equal to the average of those not employed in mining?—I have known pitmen go to be life guardsmen.

10513. Are they not liable to rheumatism?—They are liable to rheumatism; I should have mentioned that before.

10514. Is that when they work in a wet mine?—It is more when they get heated, and stay in a draught, they are apt to get rheumatism in the hip or sciatica.

10515. Mr. *Woods.*] It is the draught in the mine, you say, that brings it on?—Yes; they get heated, and sit down without putting their clothes on, and that causes that affection.

10516. Do you consider that the men suffer from working in the heat of the mines, for witnesses have described some of the mines as being of a very great temperature?—Ours are not.

10517. Mr. *Liddell.*] Are you employed by the colliery owners?—I am employed by the colliery owners to attend the men in case of accidents.

10518. You

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10518. You are paid a fixed salary, are you not?—In some cases, and in other cases so much a case.

10519. Is your employment only in cases of accident, or in all cases of sickness?—It is only by the owners in cases of accident; the men pay me in clubs, but that is a private arrangement.

10520. With regard to the question of milk, to which you alluded just now, I suppose that the pitmen cannot get milk as they wish?—There is not milk to be had; the farmers have taken to feeding their cattle instead of getting cows for milk.

10521. The men would buy milk if they could get it?—I have heard them frequently say that they would be very glad to have it, but they cannot get it; their little ones get too much coffee, and very often without much milk in it.

10522. Does not that fact again affect the mothers themselves, to a certain extent, in rearing their children?—I am not aware of that.

10523. You said that you attributed this serious mortality among children of a tender age to the use of stimulating drinks, and you mentioned that coffee was used instead of milk; had that reference to the mothers, or to the children themselves?—To the children. After they are weaned their mothers have not cow milk to give them, instead of their own, and they give them coffee and stimulating food, which I am afraid is the cause of this mortality among these young children.

10524. As far as the mothers are concerned they are healthy?—Very healthy, and the children are beautiful children up to that time.

10525. This difficulty of the milk could not be very well got over, inasmuch as the pitmen have no close attached to their cottage where they could keep a cow?—No, and the farmers do not keep the cows for milk in that district.

10526. In the event of farmers supplying them with milk, the miners would be glad to buy?—Yes, this winter they have been charging a high price.

10527. But the pitmen are willing to pay a good price, if necessary, are they not?—They grumbled this year about the price of milk.

10528. Are they not rather particular about their animal food?—They must have good joints. The hewers work very hard, and require to be well supported.

10529. Mr. *Greenall.*] How long has this system of feeding cattle, rather than keeping milch cows, prevailed?—Perhaps when I went to the neighbourhood, there was not such a thing as a turnip grown for feeding cattle; now they are feeding cattle, and the cows have decreased accordingly.

10530. Can you say whether the mortality of children has increased since that time?—Yes, it has increased.

Thursday, 21*st June* 1866.

MEMBERS PRESENT:

Mr. Bruce.	Mr. Liddell.
Mr. Clive.	Mr. Neate.
General Dunne.	Mr. Powell.
Mr. Wm. Orme Foster.	Mr. Woods.
Mr. Kinnaird.	

CHARLES NEATE, Esq., in the Chair.

Mr. George Gilroy, called in; and Examined.

Mr. *G. Gilroy.* 21 June 1866.

10531. Mr. *Woods.*] I believe you are the Principal Manager of the collieries belonging to the Ince Hall Coal and Cannel Company at Ince and Wigan, in Lancashire?—I am.

10532. I believe you learnt the business of a viewer in Durham?—I did.

10533. How long have you been engaged as a manager of mines in the neighbourhood of Wigan?—Since the year 1846; about 19½ years.

10534. You believe that you understand the Northern system of working coal mines as well as the Lancashire system, do you not?—I do.

10535. Can you state approximately the number of persons employed in and about the pits of the Ince Hall Coal and Cannel Company?—About 2,000.

10536. As to the schools in the neighbourhood of your works, how many schools do you think there are within the township or parish of Ince?—There are at least two, and there are two more in course of erection.

10537. Within what distance from the mouth of your shaft?—They are both within 400 or 500 yards.

10538. I believe your colliery extends into and under the town of Wigan?—It does.

10539. Do many of your workmen reside in the town as well as in the village of Ince?—They do.

10540. Are the schools numerous in Wigan?—Yes, very numerous.

10541. Is it true that there are no schools exclusively set apart for collier families in that part of Lancashire, or do you know any schools exclusively set apart for them in that part of Lancashire?—I do not know of any.

10542. Does that arise from the fact that there are many trades carried on in the same neighbourhood?—Yes.

10543. The schools, then, are generally for the whole population?—They are.

10544. Are there 11 or 12 schools within the town of Wigan under the Minutes of the Privy Council?—I believe there are quite that number.

10545. Is it a fact, not only with regard to Wigan, but with regard also to the whole of the South Lancashire and Cheshire coal fields that the schools, being generally under the Minutes of the Privy Council, their number and condition is easily ascertainable?—Certainly.

10546. Are there also schools belonging to Dissenters from the Church of England not receiving Government aid?—Several.

10547. And which, I presume, are not included within the reports of the inspectors?—I suppose not.

10548. Is there within the town of Wigan a mechanical and mining school, the master having a certificate under the Department of Science and Art?—There is.

10549. Is that school maintained mainly by the colliery owners?—It is.

10550. And generally are the schools in the neighbourhood partially supported by the colliery owners?—They are.

10551. *Chairman.*] You said that there were two new schools in course of erection in the township of Ince; when did their erection begin?—Within the present year.

10552. Has the next colliery owner been building any at his own expense?—Messrs. Pearson and Knowles are building large schools at their own expense entirely.

10553. These schools in Ince are not under Government inspection, I think you said?—One of them is; it is the national school.

10554. Is there an indisposition generally on the part of colliery owners to put their schools under Government inspection?—There is generally no opposition to that.

10555. Are the schools generally of such a nature as to building as to satisfy the requisitions of the Privy Council?—Yes. I omitted, just now, to mention another school that is about being built, and the colliery proprietors have subscribed very largely to it. It is an infant school attached to the present national school in Ince. I am on the building committee, and I know that we have very great difficulty in satisfying the authorities and getting a grant.

10556. Is there a difficulty in getting space for schools there?—No difficulty whatever.

10557. What was your difficulty in this instance as to getting a grant?—It is principally a matter of time.

10558. Do you think that the requisitions of the Privy Council are unreasonable?—It is red tape I think more than anything else that creates the difficulty; it is more a question of time than anything else.

10559. When you say that it is a question of time, do you mean that it takes time to complete the buildings?—There is a large amount of correspondence to be gone through.

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10560. The result of all that circumlocution is an indisposition to apply to the Privy Council?—If I am to state exactly what took place, there has been so much delay that we regretted very much that we made such an application at all, and that we did not find the money amongst ourselves.

10561. Mr. *Liddell.*] You said that your schools are not exclusively engaged in the education of colliery children, I think?—They are not.

10562. Have you any means of knowing what proportion of children relatively to those 2,000 men, that I understood were employed, are at school?—I could not speak to that; I could very easily get to know.

10563. Have you reason to think that a large proportion are?—Yes.

10564. Do your workmen appreciate the advantages of elementary education?—I think they do.

10565. I suppose the feeling is growing amongst them?—Yes; more so than it was a few years ago.

10566. A few years ago, there was indifference shown to education?—Yes.

10567. I suppose that boys and girls attend equally?—I do not know as to their attending in equal numbers; I should think very nearly so.

10568. But you cannot give us any idea of the numbers?—Not to-day; I can easily hand in a statement of that afterwards.

10569. How are the school fees paid?—By the school pence paid by each scholar.

10570. There is no deduction from wages for the purposes of schooling?—Nothing of that kind.

10571. The parents make their own arrangements with the schoolmaster?—They do.

10572. Mr. *Foster.*] I suppose these schools are, generally speaking, erected at the expense of wealthy proprietors who can afford to dispense with Government aid?—These schools are built by wealthy proprietors; at least the bulk of the money is found by the owners.

10573. That probably is the reason why they do not put their school under inspection, or apply for Government aid in erecting them, and subsequently in carrying them on?—But ours are generally under inspection.

10574. Then perhaps that remark would apply more to the erection of the schools; would you say that the fact, that there are sufficient funds collected amongst the proprietors of collieries to render it unnecessary for them to apply to Government for aid in the building of schools?—I understand the question to be, whether the parties who subscribe the money are able to find it.

10575. Whether they can find a sufficient amount to build a school without Government aid?—Yes; generally, that is so.

10576. Mr. *Liddell.*] Speaking now of the schools not under inspection, can you state whether the masters are trained masters?—I cannot.

10577. You do not know whether they hold a certificate?—I do not know.

10578. Mr. *Woods.*] Is it within your knowledge (as it is within mine) that there are two new schools, the foundation stones of which were laid within the last month in Wigan, with regard to which, it was in debate whether there should or should not be application made to the Privy Council for a grant, it being ultimately determined to have a grant?—I heard of that.

10579. *Chairman.*] Speaking of those schools which are not under Government inspection, what is the amount of the salary that the schoolmaster receives?—I do not know.

10580. Is it mainly paid by school fees?—I should think principally so.

10581. But there is a fixed salary, I suppose, independently of the school fees?—I am not aware.

10582. Will you find for us the proportion of the whole number of boys under 12 years of age, that are in schools?—I will ascertain that.

10583. General *Dunne.*] Are there any boys at these schools who are actually employed at the pit?—I do not think there are any of ours except at the night school, and there a large number attend.

10584. Can you say whether the school hours are made to accommodate the working hours, or are they the ordinary school hours of other schools?—Those boys go to the night school only.

10585. But the hours are the ordinary ones, I understand, that prevail in other schools in the district?—Yes.

10586. Mr. *Woods.*] I believe that the persons resident in and about Wigan are all mixed together, that is to say, persons of all trades are resident one amongst another, and there is no such thing as a pit village, such as exists in the north of England, to be met with in that district?—No.

10587. Therefore there is no analysis at any of the schools of the boys that are pit boys, and those that work in other trades?—I think not, for this reason: a man may live in a cottage at Wigan, and he may keep changing about, and may work at eight or ten collieries, without moving his furniture, and his girls may work at the collieries or at factories without his moving his residence.

10588. Is it within your knowledge, that in the recent cotton distress it was found to be frequently the case that the women worked in factories and the men worked in collieries?—Yes.

10589. Do you employ any boys at the Ince Hall Coal and Cannel Company's Collieries under 12 years of age?—We do not.

10590. Do you allow the colliers to employ any under 12 years of age in the mines?—We do not.

10591. Why do you not permit it?—It is in a great measure to avoid the trouble of getting certificates, and the risk of a prosecution which might arise out of any mistake.

10592. Do the men consider that restriction as a hardship, in your opinion?—Many of them do.

10593. In the cases of widows with families, or of men with large families, the rule of your colliery is believed to be a hard rule, is it not?—It presses very hardly indeed.

10594. In your opinion, are the boys of all ages employed by you generally healthy and robust?—Very much so.

10595. Do you think it would be unwise if the Legislature were to interfere further with the employment of boys?—I do.

10596. Is it your opinion that that would be an injury to the workmen and their families?—It would.

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10597. Would it be productive of inconvenience in the working of the mines?—Yes.

10598. Have you any knowledge of the sentiments of the colliers on these points?—I know this, that very few of our men knew three or four weeks ago anything about this Committee sitting at all, and they are very much surprised to hear that there is likely to be any objection to boys over 12 years of age being employed. It has been proposed, I understand, to extend to boys from 12 to 14 years of age the restriction that now exists for boys between 10 and 12.

10599. It is within your knowledge that the colliers are surprised at that?—I know that that does not concur with the feelings of the colliers themselves.

10600. Do you find a scarcity of boys' labour in the collieries?—We do.

10601. And generally in your neighbourhood?—Generally we have a great scarcity of boys lately.

10602. Has the rate of wages for boys increased or decreased in recent years?—It has increased very much.

10603. Mr. *Liddell.*] You have said that up to a few days ago, your workmen were unaware of the existence of this Committee at all; are your men union men?—Many of them are.

10604. Is it not rather curious, those men being union men, that their delegates, at any rate, should not have informed them that these proceedings were going on in London, so much affecting their interests?—It does seem strange, but I do not think it is at all uncommon.

10605. Then there is not apparently in Lancashire that community of action among the general body of delegates which we have been led to suppose?—There may be among the delegates, but I do not think that everything that they do is communicated to the men.

10606. But as far as you know the proceedings of these combinations or unions, is it not the business of the delegates to keep the men whom they represent *au fait* at what is going on, particularly in matters so deeply affecting their interests as the matters which have been brought before this Committee?—I have no doubt it is.

10607. You cannot explain their having been kept in ignorance of the existence of this Committee?—No, except that many of the men would send their money, probably, and not attend the meetings.

10608. Or do you think there is anything in this view of it, that the body of workmen in your district are not quite agreed with other bodies of workmen upon these subjects?—I am quite sure that they are not agreed on this question, for instance, of the employment of boys, nor are they agreed on the employment of women.

10609. We have not got to that latter question yet?—I merely mention that to show that from conversations I have had with them, I know that they are taken by surprise.

10610. You alluded just now to the period of the cotton distress; when that unhappy event occurred, did many of the factory workers then thrown out of employment betake themselves to working in the collieries?—To working about the pit banks.

10611. They did not go down the pit, you mean?—None went down the pit.

10612. Did they find general employment about the pit banks?—Many of them did, but nothing like the whole number.

10613. How did the numerous applications for employment that were made at that time affect the general rate of wages; had it any material effect?—It certainly did not reduce the wages.

10614. Then I suppose that arose from the fact that these were raw hands, and therefore their applying for work did not affect the usual wages given to the more skilled hands, is that so?—I do not think it made any difference; I believe we gave about the same price to the new men as to the old ones.

10615. Did colliery owners make efforts, rather I may say sacrifices, for the purpose of giving employment to these poor men thus thrown out of employment?—There were not many men employed at collieries who previously worked at the factories; they were principally women. Not many men who worked at factories did anything more at the collieries than perhaps to get an odd day's work, by filling up coals, or something of that kind.

10616. In fact, there was no general application on the part of the male factory workers to get employment about the collieries during the cotton distress?—No, not that I am aware of.

10617. But there was a considerable number of women that did obtain employment about the pit banks?—Yes.

10618. Then the feeling against the employment of women did not prevail at that time?—Not at all.

10619. Does it now?—I do not think it does at all.

10620. Mr. *Foster.*] Does the rule of not employing boys under 12 years of age apply to the other collieries in the district as well as your own?—I only know, from conversation which I have had with other managers and proprietors, that there is a feeling rather against such employment, but whether it is carried out to the same extent that we carry it out I do not know.

10621. Do the boys between the ages of 10 and 12 find employment in other kinds of labour, or are they supposed to be attending schools?—I do not think that they find emplyment; I do not see where they are to get employment.

10622. Are there factories in Wigan?—Yes.

10623. Are boys employed in those factories?—Yes, some boys, but I do not know as to whether there are many between the ages of 10 and 12 employed in them.

10624. Are they younger than that, or older?—I do not know anything of factory work.

10625. You are aware that, in factories under the Factory Act, they permit employment of boys eight years old, under certain restrictions?—Yes.

10626. What number of hours do your pits generally work?—I should say that our pits work about 10 hours, on the average.

10627. Do they work six days a week, regularly, the year round?—No, 11 days a fortnight, they profess to work.

10628. Do the colliers, occasionally, break in further upon that time?—I am sorry to say, it is too general for them to do so.

10629. Eleven days in a fortnight being your usual number of working days, how many days do you think, on the average through the year, per week, your colliers are employed in practice?—Our pits work 11 days a fortnight. On every alternate Monday we are off work, at least those men who are paid on the Saturday afternoon are not expected to work on the Monday. Tuesday

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is generally something less than half-a-day's work. Wednesday gets to half-a-day, or, perhaps, rather over; and, possibly, Thursday is a full day's work.

10630. So that, in reality, these boys, 12 years old, and upwards, are not employed continuously through the fortnight, from Monday morning to Saturday night, at the full 10 hours per day?—No, practically they are not.

10631. Do you see any practical difficulties in the way of employing two sets of boys in the collieries?—I do.

10632. Or employing alternate day sets?—Yes; it could not be done without very great inconvenience and interruption of the working.

10633. Do you think, looking at the holidays taken by colliers generally, that boys suffer at all from overwork?—I do not think they do.

10634. Then you would not wish, I presume, the time that boys from 12 to 14 years of age are employed, to be restricted by any further Acts of legislation?—I would not.

10635. Do you think that it would very much interfere with the carrying on of collieries if such a restriction as that were made?—It would be a very serious interference indeed.

10636. Would it involve a reduction in the number of the hours during which the engine would draw the coal?—Certainly.

10637. Would it in that way lead to a considerable enhancement of the cost of getting the coal?—It would; and I may mention that if there is a great scarcity of boys now, it is quite impossible that we could get boys enough to have a double shift.

10638. Are the boys generally healthy?—Very.

10639. And not at all stunted in their growth from the nature of their employment?—No.

10640. How do they employ themselves during the play Monday, and the time that they are not actually at work under ground?—Speaking of the boys, I should say that they employ themselves in ordinary games at those times.

10641. In summer time do they resort to the fields for out-door amusement after coming up from the pits?—They do.

10642. Will they do that in preference to going home and going to sleep in summer time?—They generally do. They very often sit up too late, and they are very often allowed by their parents to play about too late.

10643. Their natural disposition takes them out of doors rather than in-doors and to bed?—Yes.

10644. Mr. *Kinnaird.*] Do not you think it natural that those boys being under ground a good deal should try and get a little relaxation, and play in the open air?—Yes.

10645. And very good for them?—Yes, I suppose so.

10646. General *Dunne.*] How many hours do the boys work below?—It is understood that, if necessary, they will be down 11 hours.

10647. Do not you think that 11 hours' labour is very hard work for a boy under 12 if it is continuous work?—If they were employed continuously it would be; but that is not the case.

10648. To what extent is it not continuous work?—For instance, a drawer boy, that is to say, a boy who draws coals is not kept going all day; very often he could do double or treble the amount of work that he now does if he were drawing uninterruptedly from his collier all the day over for 11 hours.

10649. Would it be possible for him to be kept working for the 11 hours?—Yes, allowing for meal times.

10650. Even a horse is not kept drawing always, but while the coals are filling he has rest?—I mean 11 hours, allowing for all that.

10651. Do not you think that 11 hours, even of the work that the boys do, is rather much for a boy 12 or 14 years old?—I do not.

10652. You say that there is a scarcity of boys for collieries?—Yes.

10653. Is it they prefer that kind of work which is lighter?—Not generally.

10654. Do you think that the collier boys would prefer the work of factories?—As a rule, the colliers' sons are colliers.

10655. That is from hereditary taste, I suppose?—Yes, I think so.

10656. Whence arises the scarcity of boys in such a very large population?—The demand for coals has increased enormously, and that is the only way in which I can account for it.

10657. There is a greater demand for labour, in fact?—Yes.

1058. Mr. *Powell.*] Do you find the women who resorted to labour on the pit bank during the time of the cotton famine have returned to the factory labour?—Generally not; they prefer the colliery work.

10659. Do you find that boys on returning home from their day's labour are apt to take a couple of hours rest, and then dress themselves and amuse themselves during the rest of the evening?—I should think that that is not uncommon. Many of the men come up at one o'clock, and the draw boys come up with them, in which case they have abundance of time for a little rest.

10660. Might you not almost describe it as the habit of the population to take their rest, in the middle of the day, after returning from their work, and then to amuse themselves?—Yes; I think there is a great deal of that.

10661. You would say, in general terms, that boys have no dislike to colliery labour; that is to say, no more than the dislike of all boys to labour?—I am certain that boys employed under ground like it amazingly; you could not get them to do anything else.

10662. You find them happy and cheerful at their work?—They are.

10663. They are contented with their lot in life?—Perfectly so, as a rule.

10664. Do you find the parents willing to make their boys colliery lads?—They generally do.

10665. There is no disposition among them to put them out in other trades?—None whatever.

10666. Comparing one with another, the different pursuits of a laborious character in the Wigan district, should you say that the pursuit of a collier was as pleasant a one as any other?—I think so; there is far more freedom in it; and I think it is the most lucrative of all, with the exception of men who work about foundaries, and that kind of skilled labour.

10667. Of the coarser class of labour, you think it the most lucrative?—Yes.

10668. Mr. *Kinnaird.*] You have just mentioned that you think the employment of boys in a pit a most eligible one?—Their parents consider it so.

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10669. I am asking what you consider?—I think it is.

10670. Are there no peculiar dangers in mines?—Yes, there are some.

10671. And do you think that the boys who work under ground are as ruddy and healthy-looking as the rest of the population?—In our district they are.

10672. Have you read the evidence of some of the inspectors who have been examined here?—I have not read any excepting Mr. Dickinson's and Mr. Atkinson's.

10673. Perhaps you remember that they thought the boys did look very much paler than the boys who are working above ground and different from them?—I think they look quite as healthy as other people on the surface, and I am quite certain that they enjoy their food quite as well.

10674. Then, I suppose, you think it is very unwise for the Legislature to have made any regulations preventing the enjoyment of all these privileges down the mine?—I think it very unwise for the Legislature to interfere at all in the matter.

10675. You would let the thing be supply and demand?—I should just allow it to take its own course.

10676. I suppose you consider education a thing of considerable importance for the boys?—Yes, up to a certain point.

10677. You do not think it a great disadvantage for a boy to be precluded from being educated, if I understand you?—I think there is no difficulty in a boy getting sufficient education before the age of 12 to enable him to be a collier, and a good Christian too.

10678. Do you think that that is the general experience of children who are employed down in collieries?—I think that the opportunities which they have for education up to the age of 12, as I said before, are quite sufficient, with the addition of a night school, to which the boys are able to go.

10679. You would leave it then entirely to the parents, and not hamper the managers of mines by any regulations on the matter?—I would.

10680. And you think that past legislation has been rather unnecessary than otherwise?—I do not think that any good has resulted from legislation about the employment of boys.

10681. In fact you would leave all those things to take care of themselves?—I would leave them with the parents and with the owners of mines.

10682. They are responsible for the children, you think, and the State has nothing to do with them?—Just so.

10683. And you are not aware of any evils having resulted from the working of young children in mines; you have never heard of any?—I should not like to say so.

10684. Do you mean that you have heard of some?—I do not remember any great evils, but it is not unlikely that there may be some evils nevertheless.

10685. You think it is a great pity that the Legislature ever undertook to interfere between the parent and the child, and the employer and employed?—I think it quite unnecessary; I think it would be just as reasonable to stop little children working in chemical works, where one sees every day in the midst of an atmosphere which is not fit for them to breathe, as it would be for the Legislature to interfere in this case.

10686. Mr. *Powell.*] Comparing the physical condition of the factory boys with that of the colliery boys, which should you say were the healthier and the most vigorous set of boys?—Most decidedly the colliery boys.

10687. Probably they are both of a blanched complexion, the one class from the impure air of the factories and the other class from being under ground?—Generally the colliery boys are stouter.

10688. If there be any defect in the education of the children, should you attribute that defect to the want of opportunities or to the want of care on the part of the parents?—I should attribute it to the want of care on the part of the parents.

10689. Should you wish to repeal the law which now exists with regard to the employment of boys, and the education of boys?—No; I should be quite content to leave things as they are.

10690. *Chairman.*] It is rather to future legislation than to past legislation, that you object?—Yes.

10691. Do you think that past legislation was unnecessary?—I think it was unnecessary.

10692. Is it not in consequence of the trouble imposed by the Act of 1860, that the employment of boys under 12, has been given up to a great extent?—To a great extent.

10693. That was an effect that arose out of the Act of 1860, was it not, and as a fact, the employment of boys under 12, has very much decreased since that Act, has it not?—It has.

10694. And in consequence of that Act?—Yes.

10695. Then assuming that the employment of boys under the age of 12, is a bad thing, that Act has been a useful Act, has it not?—I do not know that it has been a useful Act; it has prevented boys from being employed, but I do not know that they have gone to school.

10696. Do you think it a good thing that boys should be employed in a pit under the age of 12?—I do not like, as a general rule, to see it, but there are many cases of hardship which would result from forbidding it.

10697. So far as it has prevented boys under 12 from going into the pit, that Act has done good?—I do not know that it has done good; there were not many cases of boys being employed between the ages of 10 and 12 before that time, and the only cases that have been brought under my notice were cases of widows with children, and those were cases of hardship.

10698. I suppose it was five or six years ago, that workmen used to come to you to employ boys of that age?—Later than that; within the present year.

10699. How do you account for them coming to you, when the law has placed the restrictions which it has placed on the employment of boys?—It was merely to ask for an exception to be made under occasional circumstances that they came to me.

10700. Have you occasionally made those exceptions?—I have done it in this way: I have put the boys between the ages of 10 and 12 into a lamp cabin, or into some place about the pit, employing him in the provender place, or in something of that kind.

10701. Not the regular pit work?—I have not sent these boys down the pit.

10702. But the provender place is down the pit,

pit, is it not?—No; we provide the provender on the top.

10703. Then you merely employ those boys on the pit banks?—Yes.

10704. You are aware now, are you not, that there is a great movement amongst the Lancashire miners in favour of this Committee, and for an alteration in the law?—I am aware that there is a movement, but I was very much surprised to find that the men, that is to say, those who have followed their employment daily, knew so little about it, or acknowledged so little.

10705. But the men who are in the unions may know a great deal more than they choose to tell you, may they not?—Possibly.

10706. There is a great deal of reserve (perhaps too much) between workmen and employer in any matter connected with the union, is there not?—I think there is.

10707. Should you be surprised to be told that there were something like 14,000 of the miners that petitioned or were movers for this Committee?—I should be surprised to know that they all signed their names to the petition, and were all parties to it. I do not believe in those monster petitions.

10708. That is to say, I presume you do not believe in all the signatures being *bonâ fide*; but you do not doubt, do you, that there has been, whether with reference to the employment of boys, or with reference to the other objects supposed to be the objects of this Committee, a very considerable movement in Lancashire for those objects?—I have occasionally seen reports in the papers.

10709. What are the papers that the men read. I mean the papers about their own matters that circulate amongst them in your district?—I really do not know.

10710. You are not acquainted with the papers that the workmen read; you do not, in fact, take that trouble to acquaint yourself with the feelings of the workmen?—There are some papers published, I think, by the union, or by some parties connected with the union; at least there were some little time back, and probably they read those.

10711. Have you, during the sittings of this Committee, seen any account of the proceedings of the Committee, or any reference to them in the papers?—I have.

10712. Were those accounts of a nature to impress you with an idea that the workmen were taking any interest in the Committee?—The particular papers that I saw were not published by the workmen or the union.

10713. Have you seen the papers that are more especially read by the workmen?—I presume that the Wigan papers are read by the Wigan men.

10714. The cheap papers, I presume, you mean?—Yes; penny papers.

10715. Have you seen in those papers any articles complaining of an extension of the restriction?—I do not remember seeing any.

10716. You have not seen any articles saying that the present restriction is a hardship to the workmen, have you?—No.

10717. As far as you can judge by the press, there is no appearance of such a feeling among the workmen?—As far as one may judge from the press there is not.

10718. Did I rightly understand you to say, in answer to a question of Mr. Foster's, that taking the employment of boys for a whole fortnight, they did not work so many hours as the men; taking, I mean, even those boys who are over 12 years of age?—The men themselves employ a large number of boys. You may say that every man employs one, as a rule, and some of the men employ two. The colliers have the control of the whole of their own boys, and we do not usually interfere with them.

10719. Did I understand you correctly, that the boys did not work the same number of hours in a fortnight that the men did?—I think that generally they work quite as many as the men.

10720. Then the men work no more hours than the boys?—Generally, I think, they work pretty nearly the same. Taking the drawers, the boys who are employed by the colliers, they will work as a rule quite as long as the colliers. Sometimes we have to find fault about the colliers leaving them behind.

10721. But the boys employed by the masters do not work quite so long, do they?—The boys employed by the masters generally work longer, if anything, than those employed by the colliers.

10722. What is the proportion of boys employed by the masters to the boys employed by the colliers themselves?—I am not quite prepared to answer that question, but I think that the men employ at least double.

10723. What is the allowance in the number of boys to a hewer?—Every collier as a rule has at least one, but many of them have two boys to take away their coals, so that you might put down about one and a half as a fair average for the number of boys employed by the men, in addition to the boys that we employ in driving ponies, keeping doors, and other matters.

10724. You do not think it is possible, as I gather from your evidence, to carry out the work of a mine without the boys working as long as the men?—I do not.

10725. Mr. *Liddell.*] Is the Wigan coal hard coal?—We have got almost every variety in our district.

10726. Of course the number of boys employed per man varies very much with the quality of the coal, whether it is hard or soft?—Yes, I may mention this fact, that we do work a mine where a man gets a very small quantity per day, varying from two feet to as low as eight inches; it is the cannel mine.

10727. You said just now that you have not observed that the women who found employment at the period of the cotton famine have shown any inclination to go back to the factories or other work, but have continued about the pit bank?—As a rule they prefer the pit bank.

10728. Then the inference which I draw from that is, that the occupation at the pit bank is popular among the women rather than otherwise?—Well, it is after it is tried; I may say, for instance, that we have asked all the women that we employ (varying from 78 to 82 in number), putting the question severally to them, would they wish the Legislature to prohibit our employing them; they say "no;" we have not a single one who has answered to the contrary; many of them have been asked for their reasons, and have said that they would not go back to the factory again, but would sooner go to the workhouse; I do not know how far they really felt what they said.

10729. And a great number of these women are women who have not been brought up to this occupation?—They have not.

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10730. But have engaged in it recently?—They have engaged in it since 1862.

10731. Is it a demoralising occupation for them?—I think not, indeed I am satisfied that it is not.

10732. Should you say, from your own knowledge (I will ask a plain question), that there are any considerable number of known prostitutes among these women?—I believe there are none.

10733. Do you know as a fact whether many of them have bastard children?—I do not think that bastardy is more common, and I know that it is generally considered to be less common than it is amongst factory girls.

10734. Relatively to the female population employed in the factories, is the conduct of these women more or less loose?—I think less so than that of either agricultural female labourers or factory girls, judging from the statistics of other counties.

10735. Is there much chaff or much rudeness apparent as between the male and the female workers about the pit bank; has it come under your own observation whether that is the case or not?—It is a matter that I have looked very closely into since this inquiry, and I have found that we have not a single instance where a girl has had an illegitimate child by a man employed on the pit's brow.

10736. That is the result of a very careful investigation of this matter on your part?—It is taken from their own lips.

10737. It is very hard work, is it not, that these women perform?—Well, it is not easy work, not all of it; but they are principally employed in picking coals on screens, which are covered in.

10738. There is no tilting of waggons, or anything of that kind, that they have to do, is there?—There is some tilting of tubs; we employ a few on the pit's brow for that, but the proportion is small.

10739. That is hard work, is it not, tilting the tubs?—Well, it is work that does not enfeeble at all; they are all healthy and good looking with it.

10740. Then the hardship of the work would consist rather in exposure to the weather, I suppose, than in the actual physical force required for the performance of the work?—Yes; and we endeavour as much as possible to screen them from the weather by covering the screens on the pit's brow.

10741. Then, I understand you to say, that they work under cover?—For the most part, these do.

10742. Mr. *Foster.*] With respect to the boys employed by the men in drawing coals, and the boys employed by the masters in driving ponies, minding doors, and so forth, which is the more laborious kind of work of the two?—The drawing.

10743. And at that kind of employment, I think you stated that the boys were employed by the men a less number of hours per day, and that they were, generally speaking, a less number of hours under ground than those boys employed by the masters, who you state are engaged in somewhat easier work, though employed a longer time?—Yes, necessarily so.

10744. With regard to the ages of those boys, are the boys employed by the men generally older and stronger boys than the boys employed by the masters in driving ponies, and so on, or are they about the same age, do you think?—It depends upon whether a man has one or two boys; if he has two sons, one may be 12 years old, and another 15, and he would employ those two to draw for him in preference to getting a strange lad of 15 or 16, perhaps.

10745. The boys who work with the colliers are, when the colliers have boys of their own, generally the sons of the master colliers, are they not?—Yes.

10746. Mr. *Powell.*] With regard to the women employed on the pit's bank, do you find that many of the affiliation cases which come before the magistrates, arise in connection with these women?—Very few indeed.

10747. What is the proportion between the married and the unmarried women employed at your own colliery, for example?—We have 13 married out of 78 women; and, I think, five widows.

10748. Mr. *Liddell.*] Have these married women families at home?—Some of them have.

10749. In their cases how are the children looked after?—They generally have a grandmother, or some old woman near, who looks after them.

10750. Mr. *Woods.*] A Member of the Committee wishes to have the hours of the labour of the men and the boys more accurately stated; what would you say are the hours of labour, on a full day, that the men make; first will you tell us what time is it the rule for the men to go down into the pit in the morning?—Generally all is ready for them about five o'clock, and they are not allowed to go down after six.

10751. What time do they come up?—At all hours; from, say, one o'clock to six o'clock.

10752. And do the boys accompany them down, or do they follow them down; what is the rule of the colliery as to that?—They accompany them down; they must all be down before six o'clock in the morning.

10753. And do the boys return with the men?—Yes, generally they do.

10754. Are there more boys employed by the colliers than by the master, in your collieries?—Yes; I should say, in all probability, two to one.

10755. You said that you had almost every variety of mine; I believe you have from 20 to 25 workable seams in the Wigan coal field, one over the other, have you not?—I believe we have.

10756. Of all thicknesses?—Of all thicknesses.

10757. Very much interspersed with faults?—Yes, very much indeed.

10758. Causing the levels and the inclination of the mines to vary very much?—Yes.

10759. You were asked about the operation of the Act by the Honourable Member for Perth; did you mean that you objected to further restrictions being imposed?—Yes.

10760. And you would wish the present Act to go on working as it now is?—Yes.

10761. A Member of the Committee asked you about the continuous labour of boys in the mines; I suppose that there is time afforded by the master of the colliery, and the colliers themselves, for the meals of the boys?—Yes.

10762. Is the labour continuous during the whole time that the boys are down?—There is half an hour for breakfast, and an hour, or in some cases half an hour, for dinner.

10763. Even apart from that, is the labour continuous

continuous in the work of the boys?—Decidedly not.

10764. And, in short, it is not to be compared with the number of hours that they work in carrying off bricks, for instance, or in any other continuous labour?—No.

10765. What is the reason why drawers' work underground is not continuous?—The drawer has to wait till the collier gets his coals ready, and early in the morning there is very little doing for the first two or three hours; during that time all hands have little to do, with the exception of the hewers.

10766. *Chairman.*] Then you say that boys are allowed sometimes one hour, and sometimes half an hour for dinner; do you mean that all work is stopped in the colliery during that time?—With the exception of one pit, with us all work is stopped half an hour for breakfast, and an hour for dinner.

10767. Supposing that a hewer chooses to go on with his work during that half hour, what then?—He is not interfered with at all; there is no one who has more freedom than a hewer, none of Her Majesty's subjects.

10768. He works when he is in the humour, I suppose?—He just does what he likes.

10769. You say that a great many of them come out at one o'clock?—Yes.

10770. You do not like men making such short day's work, do you?—No, it is very much against the employer.

10771. If you found a man habitually making a short day's work, should you dismiss him?—We have tried that, but there is such a scarcity of men as makes it difficult to resort to that.

10772. Have you any minimum amount of coal that you expect a hewer to hew in the day?—We have long since given up any control over that, but, of course, it would vary very much according to the nature of the coal.

10773. I understand you to say that, as far as you can, without interfering with what the hewer is doing, you enforce an hour, or half an hour's cessation of labour for dinner?—Yes.

10774. You stop the drawing of the coal, and you stop all the working, except the hewing?—Yes.

10775. You said that there is very little labour done, except hewing, in the first two or three hours in the morning; would there be any difficulty in the boys coming down a couple of hours later than the men?—There would be a difficulty, because in many cases a man leaves his work in the evening partly done, and there is nothing to do but to fire a shot the first thing when he goes down in the morning. And in working long wall it is a very common thing to hole a long length, and to leave it to fall (after taking out the sprag) during the night.

10776. Is it your rule to take away all that is cut in one day before the pit is left?—That is left entirely to the collier.

10777. So that there may be a heap of coal ready for the drawer as soon as he gets to his work in the morning?—Yes.

10778. Mr. *Liddell.*] Mr. Woods stated just now, and you confirmed him in the opinion, that there are from 20 to 25 different seams of coal in the Wigan coal field?—Yes.

10779. Do you work your thin seams in connection with the thick seams?—We do where they are very good.

10780. What is the thinnest seam that you do work?—Speaking for ourselves, I may say that we do not work anything (with the exception of the Cannel, which must be considered an exception) under three feet; but in our district we are working a mine about two feet thick.

10781. Then the Wigan coalfield, as a rule, is very efficiently worked?—Yes.

10782. Mr. *Powell.*] I think it is the practice, is it not, of the coal proprietors in the Wigan coalfield to take from the owners of the surface one or two seams, as the case may be?—Yes.

10783. Or a dozen, it may be?—Yes.

10784. They do not take all the mine from the surface to whatever there may be below, but a portion only?—Yes.

10785. And some other lessee will, perhaps, take the other mines, or a portion of them?—That is precisely our case where we are working at present.

10786. Mr. *Woods.*] With regard to the employment of women, of course you do not for a moment intend to say that the women's labour is not very hard work; filling coals, for instance, is very hard work?—Yes, it is hard; but it is considered, and it really is, a healthy occupation.

10787. I think you have some photographs that you can show to the Committee, which will give some idea of the appearance of the girls employed on the pit's bank of your collieries?—I have. (*The Witness handed a photographic album to the Committee.*)

10788. Many of the young women, I believe, attend Sunday schools?—They do.

10789. And also the weekly meetings and Bible classes at Ince and Wigan?—Yes; I put the question to our incumbent one day last week, and he said that he was not prepared to say how many out of about 80 women and girls, whom he had in the weekly Bible class, were from the collieries, but he believed that they exceeded a half; that is to say, more than half of the number he had attending that class, were colliery girls; of course, they might be from other collieries as well as from ours.

10790. Is it your opinion, that it would be injurious if there were a legislative restriction, prohibiting women from working in the neighbourhood of coal mines?—I am sure it would.

10791. What is your own opinion of the desire of the workmen; do you think that the workmen desire generally that women should be restricted from working, or that they should not?—I believe that the desire of the workmen at our colliery is that the women should not be disturbed.

10792. Do the fathers of the young women ever bring them and ask you to give them employment?—They do bring them to the overlooker; I may mention, perhaps, that I put the question to a man (I have no objection to give his name if the Committee ask for it), who is a Union man; I should think he is a man of 50 years of age. When I was down below the other day, I asked him if he approved of this movement that was going on to get the Legislature to interfere in the employment of women; he said, "I do not, and I was very much surprised to find that such a movement was being made." I asked him if he had not been told by the delegates that such a step was being taken; he replied that he had not; but that the first thing he knew about it was from reading in the paper the evidence given by Mr. Pickard. I may mention that the man to whom I allude has two girls employed on the pit bank. The portrait of one

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of them, if not both, may be found in that book of photographs which I have shown to the Committee.

10793. Your objection to a restriction being imposed upon the employment of women is founded on an objection to the principle of legislative restrictions to labour, is it not?—Yes, as well as on the hardship to the women themselves.

10794. *Chairman.*] You are aware that in some mining districts women are not employed on the pit's bank?—Yes.

10795. Have you ever visited those districts?—Yes; I have not seen any women employed in Northumberland or Durham for many years.

10796. Comparing the female portion of the miners' families in Northumberland and Durham with the female portion of the miners' families in your present district, on which side is the advantage of the comparison?—In point of industry, I should say with Lancashire.

10797. But in point of manners and appearances, and what is called refinement, on which side does the advantage lie?—I scarcely know how to answer that question; but I think that a good deal of the appearance of the Durham and Northumberland girls is at the expense of their fathers and brothers, who have to work so much the harder for it; that I have observed.

10798. But then the reverse takes place in Lancashire, perhaps; that is to say, that the girls are working instead of the men to some extent?—I do not think that that is often the case.

10799. Do not you suppose that the men who would most object to stopping the employment of women, would be idle workmen who had strong girls whom they would make earn the money that they ought to earn themselves?—I have no doubt that there are some cases of that kind.

10800. Are you aware of any feeling among the better class of workmen against the employment of women?—I do not think there is any feeling against it whatever amongst the persons actually employed.

10801. Do you think that those who have come before us, and who have made strong statements as to the feeling of the working (at least of many of the workmen) against the employment of women, have had no foundation for making such statements?—I think it is a stock grievance; every year the agitators are obliged to get up some cry, and this year it is a cry against the employment of women and boys, and so on.

10802. You are aware that in some mining districts the employers themselves have a great objection to the employment of women, are you not?—I am not aware that there is a great objection to it on their part.

10803. It has been stated before this Committee, that the employers in some districts would not employ women even if they were pressed to do so; you are not aware of that?—I am not aware of that.

10804. Mr. *Liddell.*] What do these women earn?—From 1 *s.* 2 *d.* to 1 *s.* 9 *d.* a day.

10805. Supposing that they were prohibited by law from working on the bank, could you supply their places at an equal rate?—We should have to employ men in that case.

10806. And would you obtain the labour of men in that occupation at the same rate?—We could not.

10807. It would be more expensive, you mean?—Very much more expensive.

10808. What would be the wages of a man employed as these women are employed about the pit bank, lifting tubs, and so forth?—We do employ some men on the bank already.

10809. Then you can very easily make a comparison between the two; what are the wages of a man as compared with those of a woman?—From 2 *s.* 6 *d.* to 3 *s.* we pay those men.

10810. Boys could not do this work of which we have been speaking, I suppose?—No; boys could not do it.

10811. Then such a prohibition as has been suggested would, of course, impose the substitution of men's labour for women's labour, which would be at a great cost to the employer?—It would.

10812. And of course that becomes an element in the objection to altering the system?—Yes.

10813. Mr. *Foster.*] Are you quite of opinion that there is an absence of any really strong feeling on the part of the working colliers with regard to this employment of women?—That is decidedly my opinion.

10814. Do you think that at the present moment there is a very strong feeling of watchfulness amongst the colliery population of the country with regard to the proceedings of this Committee?—I do not think that the colliery population, as a rule, feel any concern, any anxiety, indeed any interest in it, at all; I am speaking for our own district.

10815. You are of opinion that a number of grievances (I think that you use the term "stock grievances") have been put together in the name of the general body of the colliers, although many (and I think you have mentioned some within your own knowledge) are not aware of anything of the kind going on?—Yes.

10816. Therefore you think that with regard both to the employment of women, and also with regard to any further restriction in the employment of boys, the colliery population generally are taking no interest whatever in the matter?—That is my opinion.

10817. Do you think that if the question were put to individuals, apart from any outward influence, they would be really opposed to any further restriction on the employment of their boys, or on the employment of their wives and daughters?—I am quite satisfied, from my own observation, and from conversations with the men, that they would consider it a very great hardship indeed if the Legislature interfered with the employment of boys further than the Act which is now in existence; and I am quite sure that those men who have families of girls, would consider it a very great hardship if the Legislature interfered with regard to that.

10818. Are you of opinion that the origin of this Committee is to be attributed chiefly to a certain section of men, who are of opinion that something must be done on their part?—That is my opinion.

10819. And that it is really but a small section of the men whose names have been put at the bottom of this petition, and that in fact the great bulk of the mining population know very little about it?—That is my opinion, and I think that the small section are not even all workers; they are men of another stamp, who have been workers, but whose business now is to agitate.

10820. And you think that this petition is chiefly an emanation from that body?—I think that it had its beginning there.

10821. General *Dunne.*] You say, I think, that the employment of the women consists in filling coals partly?—Principally in picking and cleaning coals.

10822. In shovelling coals also?—Cleaning them on the screens. The tub is upset, and the coals run over screen bars; the dust and small fall through those bars, and the riddled coal remains on the top; the duty of the women is to pick the dirt, the shale, and stone, and refuse out of the coal.

10823. Does the woman then fill her shovel with it?—It runs down the waggon generally.

10824. Then there is no great labour, such as a man would do, in that work?—There is filling the coal, besides that out of stock, and that is filling it with a shovel into boxes.

10825. Is not that very hard work?—It is hard work.

10826. Is it usual to employ women, in agriculture, in such work as that?—I have seen them shovelling manure many a time.

10827. Is it the usual practice in agricultural districts that women are employed in that way?—I do not think it is uncommon.

10828. In England?—In England, I have seen it.

10829. Do not you think that that is an employment that a woman ought not to be employed in?—If I saw that it injured her bodily health, and that she were not cheerful under it, I might think so.

10830. Do not you think it a kind of masculine employment that women ought not to be employed in?—It is an employment that they do not dislike.

10831. Mr. *Powell.*] What are the hours of labour of the women?—From six to half-past five o'clock, with half an hour for breakfast and an hour for dinner.

10832. Are those hours of relaxation for breakfast and dinner always at the same time?—Generally they are.

10833. Do you find that the occupation of these women exposes them to many accidents, from catching their fingers or hands, for instance?—Not many.

10834. And cases of serious accident are probably rare?—Very rare.

10835. If they do occur, do they arise from carelessness?—Generally.

10836. *Chairman.*] Comparing the wages of the men who work on the pit's bank with the wages of the women who work on the pit's bank, are the women paid as much in proportion to their work as the men are; for you say that the men are paid 2 *s.* 6 *d.* or 3 *s.* a day, and that the women are paid 1 *s.* 2 *d.* or 1 *s.* 9 *d.*?—Generally the women get the lighter work; for instance, the women are put on the screens picking and cleaning coal, whilst the men would use the shovel.

10837. Looking to the work they do, do you consider that the women's work is cheaper than the men's work?—It is cheaper.

10838. But you cannot make the comparison in the same work, because they do not do the same work?—They do not do quite the same work.

10839. You remember the Act prohibiting the employment of women in the pit, do you not?—Yes.

10840. May I ask you what was your opinion of that Act?—I think it was a very necessary one.

10841. What was your opinion of it at the time, if it is a fair question?—My opinion at the time was that it was a hardship to those already employed, and that instead of discontinuing the employment of them all in one day we ought to have allowed those to remain who were then in.

10842. If you had been compelled to give evidence about the employment of women in the pit then, you would have said very much the same thing as you say now about employing them on the pit bank, would you not?—I do know that there is a great difference between women being employed down below and being employed on the surface.

10843. You did not feel that difference at the time of the Act, but you rather felt the objections to the Act at that time, did not you?—Only as regards time and as to the manner in which it affected the persons concerned; the women themselves, I mean.

10844. There was at that time a strong feeling among the workmen against that Act, was there not?—Amongst some of them.

10845. You told us some time ago, I think, that you did not make it your business to read the papers which were usually read by working colliers?—I beg your pardon; I did not mean exactly that; what I intended to say was, that I was not aware what particular papers they read; I believe that papers are published under the auspices of the union, and those papers I may say I never see.

10846. You never see the papers that are published under the auspices of the union?—I do not.

10847. Then how can you take upon yourself to speak with the confidence that you do, and to say that this movement does not meet with the concurrence of the great body of the colliers, at any rate of the unionists?—I am in daily contact with the men, and I judge from conversation with them.

10848. The unionists comprise the great proportion of the working colliers, that is to say, the greater number of working colliers are members of the union, are not they?—I should think the majority of them in our district.

10849. Then you will not take upon yourself to say, will you, that the unionists forming the majority are not generally in favour of this movement?—That is my opinion, that it is confined to a very few.

10850. You adhere to your opinion that it is confined to a very few, and many of those few not actually now working colliers?—I do.

10851. Mr. *Clive.*] If I may ask you an impertinent question, what is your age?—About 43.

10852. And do you recollect how many years ago it is since the Act was passed prohibiting the employment of women in collieries?—I do not.

10853. Supposing that it was in 1842, do you recollect all the evidence which was given previously to that in the years 1839 and 1840?—Well, I have read a great portion of it.

10854. At that time you must have been a mere boy; the Chairman asked you what your opinion was as to what took place in 1842, but were you capable then of forming an opinion?—Probably my opinion scarcely dates so far back as that; I knew of the feeling generally prevailing at the time.

10855. Do not you recollect that the great

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ground for the passing of that Act was the ground of immorality?—Yes.

10856. Not the hardness of the labour, but the immorality which prevailed from the exposure of the persons of women, and the indecency of it?—I think that it was on the moral ground that the enactment was carried in that case.

10857. Mr. *Woods.*] Do you wish the Committee to understand that the collier men and collier women should be left to settle this question for themselves, and that it should not be determined by legislation?—I do.

10858. That is your opinion?—That is my opinion.

10859. Do you think that the present mode of payment of colliers' wages in Lancashire is a reasonably equitable one?—I do.

10860. Is the system, in your opinion, as fair for the employed as for the employer?—That is my opinion.

10861. Will you describe the plan; have you at each pit tubs of a certain shape and of certain dimensions, the tubs being of uniform size, and their dimensions being well known, and the tubs being approachable by all concerned, the men and the masters, and there never being any change in their size?—Just so; many of them just barely fit the cages, and you could not well make any alteration in them.

10862. Can you give any approximate number of the tubs in your colliery; if you can do it roughly that will do; if there are one and a half tubs to one man, or whatever it is, what would the gross quantity be?—I should think we have at least 5,000 tubs.

10863. Would it be a costly operation to alter the size of these 5,000 tubs?—It would.

10864. And as a rule they fit the cages, and it is not easy to change their size, is it?—Generally that is the case.

10865. Are the colliers paid a certain fixed price for each tub, or (which is the same thing) is it in many cases by the score, 20 tubs being reckoned to the score, for instance?—It is always either the one or the other.

10866. When a man comes and engages himself at the colliery, has he opportunity to see the size of the tubs; are they always lying about on the pit's brow?—Yes.

10867. And what is the nature of the agreement as to filling; is it that the tub is to be level full?—Yes; it is understood that the coal fills the tub, so that it comes level full to the top, at a certain price.

10868. Supposing that one comes up a few inches below level full, what is done in that case?—The man is simply not credited with it.

10869. Not credited with the price for hewing that tub?—Just so.

10870. Does the price paid per tub represent the whole wages of a collier in the Lancashire coal fields?—No, by no means.

10871. There is a system called yardage, is there not?—Yes.

10872. Are you prepared to give to the Committee an estimate of what proportionate part of the wages of any of your collieries are paid by the tub and what part by the system of yardage?—I can state the proportions in the case of one pit, the particulars of which I happen to have with me

10873. Is that a coal pit or a cannel pit?—A coal and cannel pit; out of 42,410*l.* sterling 34,228*l.* was payment for a certain number of tubs, and 8,182*l.* for yardage, &c.

10874. Perhaps then the proportion is about 1 to 4 or 1 to 5 of yardage?—Yes.

10875. Have you read the evidence given by some gentlemen from Durham and Northumberland, a few days ago, as to the system of weighing coals in their district?—Yes.

10876. Do you think that that system could generally be applied to the South Lancashire and Cheshire coalfield with advantage?—I do not.

10877. What is the Durham system which you have said you are acquainted with; do they weigh all the tubs which come up the pit?—Not generally; they weigh one or two tubs; in some places two tubs to a score, and in others four tubs to a score.

10878. It would not be correct to assume that the North Country system is payment exclusively by weight, would it?—It would not.

10879. Is there a yardage system in the north of England?—Yes; but it is more limited than ours.

10880. Does it bear a smaller proportion to the sum total paid for wages than it bears to that sum total in the Lancashire and Cheshire coalfield?—Very much smaller, inasmuch as it is confined to the narrow places.

10881. The working of coal mines in narrow or wide work, I apprehend is very much dependent upon the nature of the roof?—Yes.

10882. And upon other circumstances?—Yes.

10883. I believe you said that many of the mines in Lancashire were thinner than the Durham mines?—Yes.

10884. And that consequently the tubs were lighter?—Yes.

10885. And the dip of the mine is greater?—Yes.

10886. And on these accounts the use of heavier tubs would be much more inconvenient in Lancashire than it is in the north of England?—Yes; it would be impossible in our mines to use the heavy tubs that they use in the north.

10887. And therefore, unless the system of weighing was to weigh a smaller proportionate part of the tubs than in the north, it would be very inconvenient if any system of weighing were established compulsorily by Act of Parliament, in Lancashire?—It would.

10888. Does the presence of a greater number of faults or dykes or steps in the Lancashire coalfield render the inclination of the mine more variable than in other parts of England, where there are not so great a number of those steps?—It does.

10889. What would be the effect of attempting to pay entirely by weight in the wet mines, or the wet portions of a mine?—It would certainly produce great confusion and great uncertainty as to weight. For instance, many of our shallower mines in Lancashire are wet, particularly the down brow parts, whilst the up brow workings may be dry. Supposing that we had (as there generally is) a uniform price for the tubs, and we weighed them, the men sending up the wet coals would get paid for more weight than the master received.

10890. When the mine varies in quality in the Lancashire coalfield, I believe it is the custom to vary the yardage price more frequently than to vary the tub price?—It is.

10891. I believe it to be a matter of very frequent occurrence to vary the price paid by the yard?

yard?—Yes, without interfering with the scorage.

10892. Without interfering, that is to say, with the price per score or per tub?—Yes.

10893. In short, all the inequalities of a mine, as between two different collieries, or two parts of the same colliery, are rectified, by that process, by a separate and private agreement made at the time with each collier?—Yes.

10894. And this variation in the price per yard may be going on from day to day, whilst at the same time there is probably a standard price per yard for places of a given width, as well as a standard price per tub?—Yes, that is so.

10895. Then you think that having regard to the many and various agreements which are already in existence in every colliery in Lancashire, any attempt to establish uniformity by the system of payment by weight instead of by measure, would not tend materially to decrease the differences which exist about the mode of computing the payment to the collier?—I think not; it would be more likely to create some little misunderstanding to begin with, without, as I consider, getting at anything like better results as to the quantity sent up the shaft.

10896. Do you know of any cases where the same tubs circulate up and down wet and dry pits in the same colliery?—Many.

10897. The upcast shaft being hot and dry, and the downcast having the pumps in it, and being wet?—Yes.

10898. Would that cause a difficulty in the weighing?—There would always be a difficulty and uncertainty as to the tare of the tub.

10899. If the tub was altered or mended, there would be a difficulty in arriving at the average rate of the tare?—There would.

10900. I believe that many of the collieries in Lancashire have a much smaller quantity of coals drawn from each shaft than is drawn in the great collieries in Northumberland?—With a few exceptions, it is so.

10901. Then the placing a person to conduct the weighing at the small collieries would be proportionately of greater expense than at the large collieries?—It would.

10902. Because there would not be sufficient work for such men to do at the small collieries?—Just so; in some cases, for instance, not more than 20 tons a day are raised out of the shaft; of course, those are exceptional cases; but in many cases not more than 60 tons are raised in a day, whilst in others there are 500 or 600 tons raised.

10903. When a new colliery is opened, is it the custom in Lancashire, during its early history, to pay the wages entirely by lineal measurement?—It is.

10904. Without any tub price at all?—Yes; it is a very common practice.

10905. Whilst driving the main levels and the main up brows?—Yes. I have worked a new colliery for a great many months (probably 12 months), and never paid anything upon tub or weight.

10906. That system prevails also in driving exploring places, does it not?—It does, even where the whole of the rest of the pit is entirely upon the price per tub and yardage.

10907. Then it might happen in this way, that whilst a great many men were being paid at the regular established rate of the colliery, the work in exploring places would be paid by the lineal yard?—Yes, and in places near faults. A man putting through a fault sends a portion of coal up, and perhaps a greater portion of dirt, and he is either paid by the day or by the yard.

10908. That is to say, whilst he is in the neighbourhood of the unsettled work created by the fault?—Yes.

10909. Is it your opinion that the existing practice in regard to the mode of computing the wages (for that is what it comes to) in the Lancashire coalfield has given general satisfaction?—Hitherto it has.

10910. Has it been long established, or have you ever heard of any other system?—I have never heard of any other system.

10911. Have you ever had any complaints made to you against the system?—Never, from any of the men I have employed.

10912. Have you ever been asked to change it to a system of weighing, by any of your workmen?—I have not.

10913. Generally, is it your opinion that the Legislature ought not to attempt to lay down a general law for all collieries in their varied conditions, to regulate the mode of making either contracts between employer and employed, or any other contracts?—My opinion is, that the Legislature ought not to interfere with that.

10914. I believe that these contracts, as a rule, in the country in which your collieries are, are terminable by a fortnight's notice?—They are.

10915. But as a matter of practice, in case any man approaches a fault, or any of these varied circumstances which you describe arise, he makes a new contract, does he not?—Yes, he does, and, generally speaking, if he does not like his place, he leaves without giving any notice; he just takes himself off; that is about the practice of the present day.

10916. Mr. *Liddell.*] You have said that the yardage system is very seldom resorted to in the north; that is to say, the system of cutting the coal by the lineal yard is rare?—It is generally confined to narrow places.

10917. But, where it is in use, are not the coals so cut equally liable to be weighed at the pit's mouth?—Yes.

10918. Then it is correct, is it not, to say that payment in the north is exclusively by weight?—Not exactly so; perhaps the honourable Member does not quite see the meaning of my answer.

10919. No, I do not; will you explain it?—In the first place, they do not weigh all the coals in the north, but they only arrive at an approximate weight; it is a mere estimate, after all, which is arrived at by taking the average of two, or it may be four tubs out of 20; it is merely an approximation to the real weight.

10920. But any tub is liable to be weighed, and especially if the check weighman is present, and says, "I want such and such a tub weighed;" I presume there is no objection offered to its being weighed?—As a rule, however, it is two or four tubs out of the 20, as the case may be, that are weighed.

10921. But as a rule, the check weighman being there, and being able to challenge any weight, practically they arrive at the exact weight, do not they?—It is still a matter of opinion.

10922. Inasmuch as a certain number of tubs per score (the number varying) are weighed, and any tub is liable to be weighed, the workman is efficiently protected under that system, is he not, and

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and has a guarantee that he will receive money for what he cuts?—It first of all depends upon the attention which the parties in trust give to the work, and after that it depends upon their opinion as to the appearance of a certain tub which they choose to have weighed.

10923. But in any case in which a doubt is expressed, reference is had to the machine, and the accuracy of the opinion is at once tested, I presume?—Still, in my opinion, it is only an approximation to the real weight, even when that is done.

10924. Is your coal wet coal for the most part?—I should say that in our district the most of it is dry.

10925. Consequently, upon the score of its being wet coal, there would be no great objection to weighing it?—But in almost every pit we have wet places.

10926. In regard to this yardage system, this lineal cutting, do you find that the coal is clean cut out under that system, or what check have you over the workman that it is clean cut out?—You mean as regards width and height, I suppose?

10927. Yes; that the whole of the seam is clean cut out?—It is very easily discovered if it is not.

10928. In case it does not, does the overman complain of it?—He would keep the yardage back.

10929. And the man would be compelled to go back to the place and take it out; is that what you mean?—Yes.

10930. So that you wish us to understand that you have quite as much security that the seam is thoroughly and efficiently worked under the lineal system as you have under any other?—Yes.

10931. Why do you say that it is impossible to use the heavy tubs in Lancashire that are used in the north?—Generally, our seams are not so uniform in thickness; the dip is more steep and irregular, in consequence of the dislocations; those are the principal reasons.

10932. And consequently you could not run the heavy tubs with the same facility upon the tramways, I suppose?—Just so.

10933. Is there a very strong feeling among the men in Lancashire in favor of substituting weighing for measuring?—I never heard of it.

10934. Then the objection, I presume, to changing it is, that it would be altering an old custom, and the expense which would be incurred in adopting the new system?—Yes.

10935. There would be a great expense, you think, incurred in changing the system?—Yes; and also the possibility of our coming to a misunderstanding as to wages in the first instance.

10936. But are not misunderstandings more likely to occur under a measuring system than under a weighing system?—I do not think so.

10937. Would not the expense incurred be merely the erection of a weighing machine?—And the wages of a man or men to attend the machine; that would fall upon the proprietors.

10938. Is there nobody at the pit bank to look after the delivery of the tubs?—He has other work to do, and we should require an extra man to attend to the machine.

10939. Do you mean that a man can do anything else at the same time besides attending to the tubs?—Yes; he looks after the people employed; he looks after their safety, for instance.

10940. Mr. *Foster.*] I suppose the Committee may infer that you would not desire that any act of the Legislature should prevent any legal contract being made between master and man as regards the working of coal, unless it were based upon payment by weight exclusively?—I would not go so far as that. What I say is, that unless every tub were weighed, and the man were credited with the actual weight so ascertained, the weighing system has no advantage over the present system of paying by tub. With regard to the question in the abstract, as to the interference of the Legislature with the payment of colliers, I do not see why they should interfere in that more than they interfere in any other trade between the labourer and the employer.

10941. Do you think that there would be any great difficulties at the present time in your district if a system of the growth of years should be suddenly upset by an act of the Legislature rendering it incumbent for the employers to make a fresh arrangement with the whole of the men?—It would be very inconvenient; it would be attended with expense, and more than that, it would be attended with misunderstandings between master and man.

10942. General *Dunne.*] I understand you to say that the system of paying by weight would be objectionable in the district in which you now are?—Yes.

10943. Do you mean to say that it is impossible?—It is not impossible.

10944. Would it not be more satisfactory if it were adopted?—It would be very inconvenient.

10945. To whom would it be inconvenient, to the master or to the workman?—To the master; and I do not think that there would be any advantage to the man.

10946. Is it not a more accurate way of ascertaining what a man's work is, to weigh it than it is to measure it?—I do not think so.

10947. Is not there, by the system of measurement, much more facility for changing the size of the tubs and causing suspicion in the minds of the workmen?—I do not think that there is any foundation for that suspicion.

10948. But do not you think that the adoption of the weighing system would give the collier a greater certainty that he was protected from any such fraud?—I do not see why the Legislature should interfere as to the mode of payment between the collier and the master any more than it interferes on that question between any other employer and the man whom he employs.

10949. But does not the Legislature interfere in that way in the case of all goods that are sold by weight; for instance, in the sale of coal retailed in London, or in the sale of bread?—That is as between the seller and the purchaser: not as between the employer and the employed.

10950. Then as a general rule you object to that kind of legislation?—I do.

10951. You mentioned that your mines were worked by yardage; is not that common in all the mining districts of England?—It is more so in our district than in the two counties of Northumberland and Durham.

10952. Do you think that a fairer way of ascertaining what a man's work is than any other?—It must be remembered that generally the yardage is given in addition to the ordinary rate per tub; it is given for what might be called exceptional cases, but the exceptions of the north are with us the rule.

10953. If it were applied to all circumstances, do

do you think that it would be fair and more satisfactory to the men?—There would be some disadvantages attending it; in the first place, the men are expected to fill the tubs uniformly as regards quantity; in the next place, they have to send them up clean, free from stones, slates, and dirt; now by the yardage system a man has no interest whatever in what the tub contains, and he is not responsible for sending clean coal to the surface.

10954. And it would be a considerable disadvantage to the employer in that case to get so much stuff that was not coal?—Yes.

10955. You said something about the wet places; are not the wet places very exceptional and the dry ones usual?—In some collieries, wet places are very numerous. On the opening of new pits they are generally wet, and in the most of our collieries the exploring places on the deep are wet.

10956. Then there is a difference in the price of working those, I presume?—Yes, there is a difference in the price of working those; something extra on the yard generally.

10957. Do you think that there is any discontent among the workmen as to the mode of payment by measure?—I have never heard any expressed amongst ours.

10958. They are satisfied with the measurement system in your district?—Yes.

10959. *Chairman.*] I think you said at the beginning of your examination, that all the tubs which you now use in your mines would become useless if there were a change from measuring to weighing?—No, it would not interfere at all with that.

10960. I understood you to say in one of your answers, that one consequence of the change of system would be, that you would have to adopt the heavy tubs which they use in the north?—No; I will put it in this way, if you will allow me. Supposing a pit is worked with 3 cwt. tubs, it will take 20 of them to make three tons, whilst in the north, where they work with 10 cwt. tubs, it takes so much smaller a number to make the same quantity.

10961. Then you assume that every individual tub will have to be weighed?—Even supposing that we went on the same proportion being weighed (one or more tubs to the score), still, in our district, there would be so many more to weigh to a ton of coal.

10962. You say, in fact, that unless you adopted the heavy tubs of the north, which you could not do, there would be some extra work imposed on you in weighing?—We should have to weigh three tubs to one, as compared with Northumberland and Durham.

10963. Even in the measuring system, a difficulty sometimes arises as to whether a tub is not forfeited improperly, does it not?—Yes.

10964. Would you say, that if the same difficulty arises as to a tub being properly weighed, there is no greater facility of settling that difference than there is of settling a difference as to measuring?—There might be; it might be easier to put a tub over a machine, and more satisfactory; still, if you put a straight edge across the tub, that would answer the purpose.

10965. Should you not say that it is easier to settle a question that may arise as to whether the weight of a tub has been properly reckoned, than it is to settle a question that may arise as to the measurement of it?—It would depend upon whether the tub was filled with clean coal or not.

10966. But supposing that no question arises about the coal being clean, do you think that it is as easy to settle a dispute which may arise as to the measurement of a tub being properly reckoned, as it is to settle one as to the weight of a tub?—I do not see much difference; we apply a straight edge when we do not think a tub is properly full.

10967. In what way would the substitution of weighing for measuring interfere with what you call the yardage?—It would not necessarily interfere with that at all.

10968. Therefore the existence of yardage to a greater extent in Lancashire than in the north is no argument at all against the substitution of weighing for measuring?—No; but the total amount paid to the collier is less affected by that system in the north.

10969. You mean that the benefit of the weighing system, whatever it is, would take effect upon a smaller amount in your case?—Just so.

10970. But there is no inconsistency between the two methods?—No.

10971. As to the difficulty that arises from the difference of wetness in mines, is it not the practice to make a difference in the price according to the difference of hardness in different parts of a mine, whether you pay by measure or by weight?—Yes, there are exceptions of that kind.

10972. Would there be any great difficulty in making the same exception in the case of wetness?—I think there would be a difficulty there.

10973. You have an objection to applying the same rule of weight to wet and to dry coal?—Yes, owing to the chance of the collier being paid more than he ought to be paid.

10974. Because he might get paid for water as well as for coal?—Yes; and, on the other hand, supposing a tub after being used by a man whose place was wet, went next time to a man whose place was dry, the tare of it would vary.

10975. You said, I think, that it would be very difficult or inconvenient to keep a different set of tubs for the wet places?—It would be quite impracticable.

10976. There must be an interchange of tubs, you mean, from one place to another?—Yes, they go in common, everywhere in the same pit.

10977. And you said, I think, that difficulty chiefly arose from tubs which sometimes came up the down-cast shaft, being shifted to the up-cast shaft, which is the hot shaft?—Yes.

10978. You implied also that it would be difficult and inconvenient to have one different set of tubs to come up the downcast, and another set of tubs to come up the upcast?—I was speaking more of wet places underground than of any places in the pit. Supposing that the places on the rise of the shaft are all dry, and that those on the deep side of the shaft are wet, a tub goes, we will imagine, into a man's place which is wet; when it goes to the top it is simply upset over the screen and sent down again, and then it goes, say, to a dry place; now we will take the average weight of an empty tub, when dry, at three hundredweights; that may be increased to four hundredweights by the slack adhering to the bottom of it, and the wood being saturated with water. This tub is filled in a dry place, sent to the top, and weighed in the bulk, but it is not tared,

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tared, thence the man in the dry place is also a gainer to that extent.

10979. Do not the coalowners guard themselves against that, by always requiring a little more weight than is paid for when it is calculated by the ton; would they not really have 27 cwts., or 28 cwts. to the ton, for instance?—I think not.

10980. Might they not, by some such rule as that, guard themselves against any loss by making the allowance in their own favour sufficiently large?—Yes, but those are the things which would in all probability lead to disputes between us and our men. If you disturbed the system which has been established from the very opening of the mines (perhaps, in the first instance, 50 or 60 years ago), those are some of the difficulties that we should get into.

10981. No doubt questions would always arise from any change of system, but supposing you had to open a new mine where it was quite an open question whether you should adopt measuring or weight, which would you adopt as the system least likely to lead to dispute?—If it were in a district where measurement prevailed, or paying by the tub (which is the same thing) I should adopt the system in vogue.

10982. That would be because you would have had the men used to the measuring system?—Yes, I should be compelled to do it. I could not set my face against the rest of the trade and expect to introduce a new system.

10983. Mr. *Clive.*] Have you any experience of continental collieries?—I have not.

10984. You do not know whether the system there is measuring or weight?—I do not.

10985. Mr. *Bruce.*] Are your tubs all made of wood?—All ours are.

10986. Mr. *Liddell.*] Who is your inspector?—Mr. Higson.

10987. Has he recommended, on any occasion, the substitution of weighing for measuring?—No.

10988. *Chairman.*] Supposing that weighing was generally enforced by law, would there be any great difficulty in allowing exceptions in the case of particular districts, or parts of districts, with the assent of the inspector, or with the assent of the Home Office?—I think there would be a difficulty in that.

10989. Mr. *Woods.*] You are a practical man, acquainted with the relations of masters and workmen on a very large scale, what would be the consequence of the Legislature desiring to impose uniform rules for the same trade in different parts of England, if that principle were extended to all trades, as to the mode in which contracts should be formed between master and man, would it be disastrous to the men, in your opinion, if it were of universal application?—I think it would.

10990. In addition to the divers modes of computing the wages of a collier, which you have described already, I believe that you pay three or four different prices per tub for the different kinds of coal even out of the same mine?—Yes.

10991. There is one kind called round coal, the pieces of which may be described as being larger than a man's head?—Yes.

10992. That is sent up separately, and there is a very high price for it, is there not?—Yes.

10993. Then there is a second sort of coal, which will not pass through a sieve?—Yes.

10994. And a third sort, which will pass through a sieve?—Yes.

10995. With regard to the question which an honourable Member asked you about the sale of such things as bread, and the retail sale of coal in London, I apprehend that when a man goes into a shop to buy bread he has no means of ascertaining the quantity unless there is a legislative enactment that it shall be put into the scales for his satisfaction?—I believe not.

10996. But if a tub of coal is to be filled according to the contract, there is a means of ascertaining whether it is so filled?—Undoubtedly; it speaks for itself.

10997. If there was a justice man on the pit's brow he could see by the eye whether a waggon came up full or not?—Yes.

10998. Speaking generally, you think, do you not, that the inequalities occasioned by a system of weighing would practically be as great as by the existing measuring system in Lancashire?—No doubt.

10999. And generally therefore you think that the one system is probably as equitable a mode of computing the payment of the wages for that portion of the colliers' services as the other?—I do, unless you weigh every tub of coal that comes from the pit.

11000. Unless there were a restriction imposed by Act of Parliament that every tub of coals which came up the pit should be weighed?—That is what I mean.

11001. Coupled with a provision, I supposed, for drying the tub before they go down again?—Yes.

11002. You probably are acquainted with the evidence which we have had with regard to the employment of sub-inspectors under the present inspectors.

11003. Do you approve of the evidence which has been given by other employers on that subject?—I agree with what was said by those I heard on Monday.

11004. With Mr. Forster's evidence, for instance?—Yes; I quite concur with him. Whilst we are on the subject of inspection I should like to make a remark or two. Perhaps the Committee and the public are not aware to what extent sub-inspection is already carried out on the part of the masters; at present, in four of our pits, where 950 people are employed down below, we have 60 people out of that number who are employed almost exclusively to look after the safety of the rest. There are 20 out of those 60 inspectors who certainly do some work and assist the men whom they look after, but their first duty (so they are instructed), is to look after the safety of the men employed.

11005. *Chairman.*] What name have these persons in the mine?—The first are the underlookers, then come the firemen, and then the master-daytlers, as they are usually called, a kind of superintendent; "daytler" being a local term for a man who works for daily wages.

11006. Is that peculiar to the district of which you are speaking?—It is not confined to our collieries.

11007. Do you think that in collieries generally there is so efficient a system of inspection as that which you describe as prevailing in your own?—For all the larger collieries of the Wigan district I should say that it is a very fair sample.

11008. You were only speaking of the collieries under your own management?—Yes.

11009. But you say that you have reason to believe

believe that an equally efficient superintendence exists in the rest of the district?—Yes.

11010. Where it does not exist it ought to exist, I suppose?—That depends upon the nature of the employment, whether it is a dangerous one or not; that is to say, whether or not the mines are fiery; ours, for instance, are fiery as a rule.

11011. Your conclusion is that the necessity of the appointment of sub-inspectors by Government may be superseded by efficient superintendence on the part of the masters?—I think that it is already superseded.

11012. That is to say in the district of which you speak?—Yes.

11013. Mr. *Woods.*] Are you acquainted with the evidence which has been given before this Committee by a justice man named Mullins, employed by the colliers on your own pits' brows, respecting abatements which have been made at your collieries?—Yes.

11014. Have you any observations to make on that evidence?—Yes; if I am rightly informed, Mr. Mullins said that between November 1862 and March 1866 inclusive tubs were taken at the old Cannel pits (taken from the colliers, I suppose, he means) of the Ince Hall Company's Colliery, as follows: taken for short measure, 1,599 tubs; taken for containing dirt, 3,802; taken for containing slack, 1,255, making a total of 6,656; assuming the above to be correct (and I have no reason to doubt it as regards quantities), the sacrifice for short measure was 1,599 tubs against a total get or output of 888,700 tubs raised during that period.

11015. Mr. *Clive.*] During a period of three years and a half?—Yes; that amounts to one out of every 550 tubs taken for short measure, and one out of every 233 taken for containing dirt, and one out of 707 for containing slack.

11016. Mr. *Bruce.*] Have you got the proportion of the total forfeitures to the total get?—Yes; I will state that by-and-bye. The prices of the coal and cannel tubs, namely, the prices paid to the colliers as given by Mullins, are not correct; they varied from 7½ *d.* to 10½ *d.* per tub in the year 1862; and they now vary from 9¼ *d.* to 12¾ *d.* per tub. Mullins stated that the loss to the colliers was 1 *s.* 6 *d.* per tub, whereas the average does not exceed 10 *d.* a tub. The amount paid to the colliers in the same pits, from November 1862 to March 1866, is 42,410 *l.* 9 *s.* 11 *d.* Taking the 1,599 tubs forfeited for being deficient in measure at an average of 7 *d.* per tub, comprised of cannel, coal, burgie and slack, the apparent loss to the collier amounts to 46 *l.* 12 *s.* 9 *d.*, or a little over 1 *l.* sterling in 1,000 *l.* for tubs confiscated for being short of measure, and that is equal to one-tenth part of one per cent.

11017. Will you state the proportion of general deductions for all causes from the quantity raised; you have taken them separately, I see?—I have taken them separately; but the total would be about four times the difference between 1,599 and the amount which I have mentioned.

11018. Mr. *Woods.*] Will you ascertain that accurately, and hand it in by-and-bye, as asked by the Member for Merthyr Tydfil?—Yes; I may say that I confined this calculation to the short weight, seeing that that bore upon the matter before the Committee as to the question between weighing and measuring.

11019. *Chairman.*] Do I rightly understand you to say, that there is no coal for which the miner gets as much as 1 *s.* per tub, and therefore none for which you could have paid him 1 *s.* 6 *d.*?—12¾ *d.* is the highest price, with some trifling exceptions where the cannel mine is thinner than usual; but this only amounts to about one half-penny per tub on the average over the whole get from the pit.

11020. Therefore, it cannot be true in any case that the miner loses 1 *s.* 6 *d.* by the forfeiture of the tub?—It is not true, with the exceptions above-mentioned.

11021. General *Dunne.*] It is asserted that there were 6,000 tubs brought up, which were forfeited; what is the average weight of these tubs?—Somewhere between five and six cwts.

11022. How are the colliers paid?—They are paid for getting the coal, prices varying from 9 *d.* to 1 *s.* per tub; the present prices vary from 9¼ *d.* to 12¾ *d.*

11023. Therefore, the condemnation of a tub would be merely the forfeiture of so much, and of no more?—Just so.

11024. And it is very easy to calculate the entire forfeiture at that rate?—Yes.

11025. You admit that the number stated by Mullins as having been forfeited in that time is correct?—Yes, I think that is about it, making allowance for the short time that he was off.

11026. That is to say, the amount is 6,000 times 9¼ *d.*?—Not exactly so; they are not all sent up at those prices; I am now only speaking of the cannel coal; there is a king coal, and a burgie in the mine, all worked together.

11027. Mr. *Woods.*] What have you averaged them at?—At 7 *d.*

11028. General *Dunne.*] The cannel coal is the highest?—Yes.

11029. Mullins states that in the forfeiture are included case of mixture of dirt?—Yes.

11030. He is correct in that, is he?—Yes.

11031. Is not the forfeiture of a whole tub a hard thing on a workman; why should you not give him the actual weight?—But he knows that it is part of his bargain; and he knows that if he fills his tub, there is no difficulty in getting the payment.

11032. Do you think that the non-filling is to be attributed to fraud or to inaccuracy?—The practice has never been otherwise, and it would be a very inconvenient thing to pay men for so much weight, or rather so little, as they chose to send up; we should have tubs running the full distance of two or three thousand yards perhaps with only half a load in them.

11033. Is it possible for a workman to put the exact quantity on the tub; and is it not the case that it will sometimes drop out, without any fault of his?—It is quite possible, and quite practicable to avoid it; the thing is done every day.

11034. Is it not rather unfair to fine a man for a fault not his own?—It would be if such a thing arose; but it is quite practicable to avoid it, and the thing is done every day.

11035. Do not you consider it an unfair custom to the labourer that he should, without any fault or fraud of his own, be punished for the tub being short?—I suppose it would be similar to the case of a man employed in pottery ware. If he makes a vase, for which he is to receive a comparatively large sum of money, and he manufactures it with a flaw in it, or if there is any failure in his work, he is not paid for it. There are such cases.

11036. But a flaw in a vase renders it of no use, whereas surely shortness of weight in a tub

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of coal does not render the rest of the coal of no use. There is still some advantage to the owner even though he does not receive all the coal that he should, and therefore it is not quite a parallel case with that which you have put?—In this case the contents of the tub become a valuable thing in the hands of the master; but being passed through so many hands (running down what we call brows or inclines, being drawn along the level, being drawn by horses, and so on), it would be a very inconvenient thing, and a costly thing if the men were allowed to send up a tub half full or three quarters full.

11037. Still under the present system, the master is always safe, and the workmen cannot be sure of being so?—It is a mere matter of bargain.

11038. In fact, am I to understand that the workman understands that he runs this risk?—Yes, and he can be clear of it in a fortnight by giving a fortnight's notice.

11039. How so?—He has only to give a fortnight's notice and leave.

11040. Would that be satisfactory to a man who lived by that trade?—I think the best answer to such questions would be for me to state exactly what the men are making in this pit.

11041. Will you put that in afterwards?—Yes.

11042. Do the men work every day in the week, or do they give themselves holidays frequently?—The colliers give themselves a holiday whenever they like.

11043. Do they habitually cease to work early on Monday, or not come to work on Monday at all?—On every alternate Monday they are not expected to work.

11044. It is the habit that they do not work all the week; they only work four days in the week, in fact?—It is too much their habit.

11045. And they can live by the work of four days?—They can.

11046. *Chairman.*] When did you last see an inspector in your colliery?—About three weeks ago.

11047. Have you had any fatal accident within the last two or three years in the collieries that you manage?—We have had two or three.

11048. According to your knowledge and experience, do the inspectors come of their own accord to visit collieries, or do they wait till they are sent for?—I can scarcely tell; they usually come without saying anything to me.

11049. They may have been sent for by somebody else, but you are not able to speak as to that?—I am not able to say whether the inspector comes at the request of any collier or other person or not.

11050. Do you conceive that it is the duty of an inspector to visit collieries without being sent for?—I think it might fairly be left to the inspectors themselves.

11051. You would leave it to them to judge of their own duty?—Yes.

11052. You consider that they have the right of inspecting the mines of course?—No one can doubt that. I can only say for myself that I am always very glad to see the inspector.

11053. Does the inspector come more than once a year, do you think?—I should say that he comes to our works two or three times in the year.

11054. And he always sees you, I suppose, when he does come?—Not always.

11055. Has he ever suggested any alterations or improvements in your works?—Now and then he suggests some little thing, and I have always very great pleasure in adopting it.

11056. You have thought his suggestions reasonable, I suppose?—Yes.

11057. Mr. *Woods.*] Was there a very bad explosion some years ago at those works which more recently you have managed?—Yes.

11058. Is it your opinion, from the experience which you have derived in the management of mines, that very bad explosions do tend to place the master of that mine at a disadvantage in his choice of workmen, and in the rate of wages which he must pay them?—No doubt that is so. The Ince Hall Company have felt that seriously in one of their mines, as the effect of two explosions which occurred, one in 1853, and one in 1854.

11059. In the mine called the Arley Mine, you mean, do you not?—Yes.

11060. *Chairman.*] Have you anything which you would like to say further to the Committee?—There has been something said with regard to the hardship under which the colliers labour at this particular mine that Mr. Mullins called attention to. I have taken out an account of some of the wages earned by colliers in that mine, and I can state (if the Committee desire it) what the collier had to receive after such deductions were made as Mullins complained of.

11061. General *Dunne.*] You object, as I understand you, to a legal interference on these questions?—We do.

11062. But do you not think it possible that, however good your own management might be, there are managements that may require such interference?—I think that the owners of the collieries see now that it is to their interest to do everything in their power, and to spare no expense for the prevention of accidents. In my own case my directors give me *carte blanche*, and I am not restricted in the least in any respect in incurring expenses for carrying the colliery on safely.

11063. That brings me back to the question which I have already asked you; supposing it to be all right with your own colliery (which it appears to be), are there not some that would require more attention, the managers of which would not take the same pains that either your employers or you yourself take to prevent accidents?—I believe that these things right themselves; the colliers are good judges, and are now becoming alive to the matter, and they are not likely to work where they know there is danger.

Monday, 25th June 1866.

MEMBERS PRESENT:

Sir Philip Egerton.
Mr. Fawcett.
Mr. William Orme Foster.
Mr. Greenall.
Mr. Kinnaird.
Mr. Liddell.
Mr. Neate.
Mr. Powell.
Mr. Woods.

CHARLES NEATE, Esq., in the Chair.

Mr. Samuel Winn Broadbent, called in; and Examined.

Mr. *S. W. Broadbent.*
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11064. Mr. *Liddell.*] You are Surgeon to the South Hetton and Murton Collieries, in the county of Durham, I believe?—I am.

11065. How long have you acted in that capacity?—About 16 years.

11066. And you have had large opportunities of informing yourself upon the condition of the mining population of that district, I presume?—I have.

11067. You have certain returns, I believe, that you wish to lay before this Committee, will you shortly describe the nature of those returns?—Yes. I may first state that I am also medical officer to the Easington Poor Law Union and to the Workhouse. The population of the entire Union is about 27,000.

11068. A very large proportion of that population being engaged in mining operations?—Yes, there are nine large collieries in that Union. The number of coal hewers in the district is 3,500.

11069. Will you very briefly summarise the nature of the returns which you wish to submit to the Committee?—Yes. The total number of workmen at South Hetton and Murton collieries under my charge is 1,200; in that number 400 being coal-hewers and 200 boys. During last year, amongst that number, there was only one fatal accident, and that arose from carelessness on the part of a man.

11070. The numbers are in the precise proportion of two boys to one man?—Yes, in the precise proportion of two boys to one man.

11071. That is the proportion of boys to men in your district generally, as I understand?—Yes.

11072. You have noticed the physical condition of boys employed in the collieries, probably?—Yes.

11073. Is it your opinion that their health and general physical condition suffer from the work required of them?—Certainly not.

11074. Are there many boys employed in the district between the ages of 10 and 12?—I think not; very few. If they are employed they are able to read and write.

11075. The conditions of the Act are complied with to that extent?—Yes.

11076. Are there cases in which necessity on the part of the parents induces, in some instances, the coalowners to employ them when otherwise they would have an objection to do so?—Not under 10 years of age, certainly.

11077. But between the ages of 10 and 12 does that remark apply?—Yes; I believe there are some cases of that kind, where they are employed on the pit heap (not underground) in sorting the brasses.

11078. You have some statistics, have you not, as to the number of deaths in the collieries amongst the mining population, showing a very small rate in the number of persons employed?—Yes; I may state that the result of my experience is that the coal-miners are a very long-lived race; that the average of their duration of life is very great.

11079. What is the average?—I have selected this from Dr. Farr's table, that the north of England coal-miner has an average of life three years longer than the aggregate of Englishmen, eight years longer than the Cornish miner, and only one year less than that of men of the healthiest districts in the kingdom. From 63 healthy country districts, the average is 45 years; in Durham and Northumberland, 42; in Cornwall, 34. In the Easington workhouse, in which I am medical officer, there are only, at present, seven coal-hewers, who are all old men, and their united ages amount to 498 years, giving an average of 71.

11080. As to the number of deaths at the collieries, what have you to state?—I can summarise it thus: that the total number of deaths amongst the coal-hewers (including boys of upwards of 13 years of age) in the whole union from all causes, during the last three years, was only 123.

11081. In how many collieries?—Nine large collieries.

11082. Is that statement tabulated to show the different causes of death?—Yes.

11083. Can you state what appeared to be the chief causes of death; was there any explosion, for instance, in any one of those collieries during that time?—No, I think not. The total number of deaths from accident amounts only to an average of eight for each of those three years.

11084. Did those arise from falls of roof and other accidents incident to the working of coal, and beyond the control of those managing the collieries?—Yes. The total number of deaths in the entire population, in those three years, was only 1864.

11085. Have

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11085. Have you any further returns showing the health of the miners?—Yes, I have some returns connected with the applicants for parish relief. In the whole of this union, in the course of three years, there were only 90 applications for out-door relief from coal hewers, and 39 of those were from old age, some of the others being from accidents.

11086. I presume that the inference that we may draw from that is, that the employment has been good, and the general condition of the country prosperous, and that that will account, in some degree, for the smallness of the number of applicants for parish relief?—Yes.

11087. You have some returns, I believe, respecting the workmen's relief fund?—Yes.

11088. Will you shortly describe to the Committee the nature of those returns?—I should state that there is a workman's relief fund established by themselves, and managed by themselves.

11089. Wholly independent of the employers?—Wholly independent of the employers, except that the employers contribute to it a sum of 3 *s.* per man. That fund is for sickness alone.

11090. In fact, it is a sick club on a large scale?—A sick club on a large scale.

11091. Are all these nine collieries, of which you have spoken, subscribers to this fund?—No; only the two collieries to which I specially belong, South Hetton and Murton.

11092. Does that fund include accidents?—It does include accidents; but there is another fund, to which the masters contribute 5 *s.* per week for men, and 2 *s.* 6 *d.* for boys, and to which the men do not contribute anything.

11093. Over and above their subscription of 3 *s.* per man to the sick fund, there is a further subscription of 5 *s.* for men and 2 *s.* 6 *d.* for boys, in case of accidents?—Yes. The total amount of money paid by owners during the last year for accidents to men and boys was 70 *l.*

11094. The understanding is, that 5 *s.* per head is payable by the master weekly for an accident fund?—Yes, and 2 *s.* 6 *d.* for boys. From the sick fund which the men have managed for themselves they have upwards of 400 *l.* in the bank.

11095. That fund is managed by workmen?—By workmen; they elect their own secretary and their own treasurer.

11096. How long has it been in existence?—Ever since the colliery was established; I should think about 30 years.

11097. Has it always been in a solvent and prosperous condition?—Yes.

11098. You can give us some information respecting the condition of education and the schools, I think?—Yes.

11099. Can you state the number of children in average attendance at the schools, and the number on the books?—Yes. There are two schools, and two schoolmasters, and two schoolmistresses, who are certificated, but not under Government. Each master has a salary of 70 *l.* a-year, with house, coals, and rates; and each mistress a salary of 40 *l.* a-year, with house, coals, and rates. Then 40 *l.* a-year is added for religious services in one of the schools, in addition to the curate's salary; making a total of 260 *l.*

11100. Are these schools in connection either with the Committee of Privy Council or with any other school society?—No.

11101. They are entirely supported by the owners?—Entirely supported by the owners.

11102. Will you explain that additional sum which you describe as being given in addition in payment of religious ministrations in these schools?—Murton Colliery where the largest population is, is about a mile and a half from the church, and in winter time the road is very bad, and the church is very badly attended by the mining population, and to give them an opportunity of attending Church of England services, the curate holds one service every Sunday in the school-room, which is a very large one.

11103. And the sum available for that purpose is 40 *l.* a year?—Yes.

11104. What is the average number of scholars in attendance?—Two hundred and ninety-four at both schools.

11105. Including boys and girls?—No; of girls the average is 270, making a total of 564.

11106. What is the total number employed?—One thousand two hundred. There are night schools also, which are very well attended.

11107. In the winter time?—In the winter time; they will not go in the summer.

11108. Are there any further points to which you wish to direct the attention of the Committee?—No, except that I would say this: the coal miners in my district I find to be a hard-working, shrewd, and industrious set of men, and cleanly in their habits and persons, consequently contributing to their longevity.

11109. Are their houses clean, for the most part, and is attention paid by them to sanitary considerations?—Yes; you may form some idea as to how far that is the case, when I mention the fact that in the three years amongst the coal-hewers there were only four deaths from fever and four deaths from small-pox. I am speaking of the whole union and of a population of 27,000.

11110. Mr. *Greenall.*] Do the parents pay the school fees for the children?—Yes.

11111. How do any orphan children get education?—The owners provide for it.

11112. Then the orphan children are not left destitute of education?—No.

11113. The masters provide it?—The masters provide it.

11114. Mr. *Powell.*] What is the population which derives benefit from the schools you have mentioned?—Four thousand five hundred.

11115. I wish to ask you a question, which is always interesting, as showing the physiological condition of the population and their general state, are the families usually large?—They average about four, I think, to each house.

11116. Is the population a settled population, or does it consist in a very considerable measure of immigrants?—We have a few from Wales, a very few from Scotland, and a very few Irish. On the whole, they are mostly Northumberland and Durham people.

11117. Are those strangers themselves miners?—Yes, coal miners.

11118. And they come to you as such; as trained miners, in fact?—Yes.

11119. Sir *Philip Egerton.*] Are those statistical tables which, you say, are drawn up from Dr. Farr's, taken from the tables which he constructed for the Royal Commission on Mines, or are they of more recent date?—I think they were furnished by him to the Statistical Congress.

11120. But

11120. But they are taken from the calculations which Dr. Farr made for the Royal Commission on Mines, are they not?—I scarcely think so.

[*The Witness handed in the following Tables:*]

Applications for Parish Relief from Coal Hewers in Three Years:—90 Out-door.

From old age	39
Blind	6
Accident	9
Asthma	8
Scrofula	3
Dropsy	4
Consumption	3
Paralysis	4
Imbecile	1
Fever	3
Ague	2
Hernia	2
Disease of liver	2
Chronic bronchitis	4

The coal-miners in my district are hard-working, intelligent men, cleanly in their habits and persons, consequently adding to their longevity.

Hear no complaints of long hours from either men or boys.

Total Number of Deaths amongst Coal Hewers in whole Union, from all Causes, during the last Three Years:—123.

Accidentally killed	26
Consumption	18
Disease of heart and dropsy	15
Disease of brain, apoplexy and paralysis	10
Bronchitis	8
Small-pox	4
Fever	4
Suicide	4
Homicide	3
Asthma	3
Disease of kidneys and bladder	5
Disease of stomach	2
Old age and debility	15
Scrofula	2
Rheumatism	1
Disease of liver	2
Disease of spine	1
	123

Total number of deaths of entire population, 1864—Average, 621.

Coal-miners are not habitual drunkards. No case of delirium tremens.

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Mr. Alfred Hewlett, called in; and Examined.

11121. Mr. *Woods.*] Are you the Managing Director of the Wigan Coal and Iron Company (Limited), in Wigan and the neighbourhood?—I am.

11122. Have you been engaged in mining affairs for 20 years in Lancashire?—I have.

11123. And does your firm now employ about 7,000 persons in the coal and iron trade?—It does.

11124. Are you a member of the executive committee of the Mining Association of Great Britain?—I am.

11125. On the subject of payment by weight or by measure, will you state to the Committee whether weighing machines are placed on the pit banks in your district, and whether the coals are weighed so that the true quantity is ascertained by weight?—The coals are not weighed, and there are no weighing machines.

11126. Will you explain why the coals worked in the South Lancashire and Cheshire coal field are paid for by measure?—They have always been paid for by measure for many reasons, and it has been a matter of contract between the employer and the miner from time immemorial that they should be paid for by measure.

11127. That is to say, the system of payment by measure is the old established and trade system of that country?—It is.

11128. Is that a simple and inexpensive process?—It is perfectly simple.

11129. Is it not the case that a certain price is paid for each tub according to the capacity of the tub, adopted in the particular mine?—That is so.

11130. Regard is had, I believe, to the nature of the work, and it is customary to pay a higher price per tub frequently in one part of a mine or of a colliery than that which is paid per tub in other parts of the same mine or colliery?—That is so; the price for hewing (or the scoreage price, as it is technically called) is determined according to the character of the seam. If the coal becomes harder and more difficult to hew, a higher price is paid for it, and the price often varies from fortnight to fortnight.

11131. Supposing that, at the north end of the level, as contra-distinguished from the south, the mine is thinner or thicker, the price varies?—Yes, for the work where it was thinner the price would be higher, and in the case where it was thicker the price would be lower.

11132. Taking the case of hard bands coming in and making the work more difficult, is there a variation also?—Clearly.

11133. If the coal were harder, it would very likely be heavier?—That is so often.

11134. Would it operate fairly or unfairly, supposing part of the mine to be wet, if the system were payment by weight only?—It would operate very unfairly, because the weight would be very much greater where the coal was wet. That coal is afterwards drained, and the coal proprietor would lose the difference in the weight between the wet and the dry coal.

11135. How is the coal purchased by the worker of the collieries from the superior landlord?—In some cases it is paid for per acre; that is to say, so much per foot thick per acre; and in other cases it is paid for by the cubical contents of the tub. A certain royalty is paid on tubs of certain cubical contents.

11136. Is that a system of payment by measure?—Yes; that is the system of payment by measure to the lessor.

11137. Is ironstone sold frequently in the same way?—Ironstone is generally sold by measure.

11138. Do you think that there is any practical grievance suffered by the men in consequence of their being paid by measure instead of by weight?—Certainly not; the men contract to fill a tub for a certain amount of money; that tub is seen before the contract is made, and there can be no possible difficulty in ascertaining whether a tub is full or otherwise.

11139. Do you object to any legislative enactment to define the mode in which contracts shall be

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be made with respect to the payment of wages?—I do.

11140. Do you think that circumstances might arise in which it would be prejudicial for people to be tied up by Act of Parliament as to the mode of making contracts?—I think so.

11141. Do you think, also, that during the process of change it would be very difficult to readjust the system of computing the wages, taking one coal-field with another?—No doubt great difficulties would arise.

11142. If the old system were subverted by Act of Parliament, do you think that it would tend to create great difficulties, and that it would lead to disputes as to what the rate of payment should be on the new system?—I think so; I think there would be strikes in the district, and evils of that kind.

11143. In short, you object to the Legislature imposing any such change on any county, because you say it would be prejudicial at the time to that coal field?—Yes.

11144. Do you agree with the evidence on this subject which was given by Mr. George Gilroy, Manager of the Ince Hall Coal and Canal Company, near Wigan?—I do, I think it was quite correct.

11145. Mr. *Liddell.*] You have spoken of the varieties in the price of coal; do I rightly understand that when coal is dear the workmen get an advantage in the shape of an increased price for their labour?—Where the coal is thinner they get higher wages.

11146. That has reference to the seam?—To the height of the seam.

11147. Not to the market price at the time being?—No, that is another branch of the subject altogether.

11148. In reference to wet and dry coal you say that if coal were weighed, payment by weight would be prejudicial to the employer in the case of wet coal, but is that variety in coal, namely, wet and dry, peculiar to Lancashire?—No, it is not peculiar to Lancashire, but it is peculiar to those districts where the mines are worked at an easier depth, that is to say, the upper measures of the coal field are wetter than the lower measures, so that in any district where the upper measures are worked in excess of the lower, the coals will be more wet than dry.

11149. And that is the case in the Lancashire district, is it?—It is so as contra-distinguished with Northumberland and Durham, at any rate.

11150. What is a full tub; is it measured to the rim?—Yes, level, full up to the rim.

11151. They do not require the coal to be a certain height above the rim?—No, if the tub is level full that is considered a properly filled tub.

11152. Is there any feeling among the men in favour of weight over measurement?—I do not think there is amongst the workmen; there is amongst the delegates, but so far as my inquiries among the workmen themselves go, they have led me to a different conclusion.

11153. You think that the workmen adopt the system of measurement as the custom of the county, and would object to change it?—I believe that a very large proportion of the workmen are satisfied with the custom as it is now.

11154. Have you on your pit bank a person acting, on the part of the workmen, to see that justice is done between the employed and the employer?—In one instance that has been the case. Perhaps I may be allowed to refer now to the fact, that on that subject some evidence was given before this Committee, and which I should like to set right, if I may be permitted to do so.

11155. Will you explain the particular instance in which a dispute is stated to have arisen, between the workmen and the employer, on this subject of measurement?—About three months ago the workmen employed at one of our pits asked to be allowed to have a justice man placed on the pit head, in order to see that no tubs were improperly taken by the banksman. There was no objection taken to that, and the man stayed there for a few weeks. On one or two occasions, however, he rather interfered with the banksman in the performance of his duties. I gave instructions that if he interfered further he was to be ordered off the premises. He did interfere further; he not only remonstrated with the banksman for taking some particular tub, and not only argued with the man, but he proceeded to stop him from taking it, and impeded the working of the colliery for some time. I ordered him accordingly to be sent away, and he was sent away. Unfortunately a policeman took him off to prison, for two or three hours, instead of his being simply summoned as I had intended. The man was brought before the magistrates before we had really had any opportunity of going down to prosecute, and the charge was dismissed. I have allowed the same man to come back, and he is behaving himself perfectly. There is no possible objection, on our part, to the man being there so long as he does not interfere with the work.

11156. Do I rightly understand from that statement that the case in which he interfered was not a case in which his interference was necessary, but that it was a case of frivolous interference?—It was beyond the powers given him by the Act of Parliament. He had a perfect right to say that such-and-such a tub was improperly taken from the workpeople, but not a right to stop the working of the pit. His duty would be to report the circumstances to the colliers, and then for them to speak to the master or manager about it.

11157. Can you state whether the particular tub in question was properly condemned or not?—I cannot say that.

11158. Mr. *Greenall.*] I think I understand you to say that you have never had an intimation made to you by the workmen that they dislike measure, and would prefer working by weight?—Never by the workpeople themselves.

11159. Sir *Philip Egerton.*] You stated, I think, that this system of measure is a part of the contract between the master and the men?—That is so.

11160. To every contract there must be one or more parties; and all the parties must fulfil their engagements, in order that the contract should be valid?—Yes.

11161. In case of the men breaking the contract by sending up tubs not properly filled, or by sending them up mixed with dirt, what redress has the master?—The arrangement is that every tub sent up dirty or of short measure shall be forfeited; that is to say, that the hewing for that shall not be paid.

11162. That gives the master a redress in case of the men not fulfilling their part of the contract?—Yes.

11163. What redress have the men, on the other hand, if the master does not fulfil his part of

of the contract?—They have, in the first place, the redress of putting justice-men on the pit head, to see how the tubs are dealt with when they arrive on the surface; and also, I may state this, that if the men were dissatisfied with the fulfilment, on the master's part, of the contract, they would certainly make a very strong representation on the subject to the master; and, according to my experience, they would cease work in a very short time; that is to say, they would stop the pit until the matter was put on a fair footing.

11164. As I understand the Act of Parliament, the check-weigher or justice-man appointed by the men, is only employed to take account of what comes to the surface?—That is so.

11165. "Shall only be authorised to take such accounts as aforesaid"; those are the words of the Act?—Yes.

11166. Having taken such account, what further steps can the men take in order to obtain redress?—Supposing that any further redress were required, they would take this step: the justice-man would represent to the miners in any particular pit that the tubs were unjustly or unfairly taken from them; he would give the numbers of the men and the numbers of the tubs (they are known by their numbers), and a deputation would be appointed to wait upon the master or the manager to remonstrate as to the improper taking of these tubs.

11167. But that redress is not a legal redress?—It is a very easy redress, and as the men now are it is very practicable for them; they are completely masters of the situation, in fact.

11168. It is taking the law into their own hands, is it not?—No, I do not think so; that is a matter of arrangement between the master and the men.

11169. Without legislating as to the contract between the master and the men, should you see any objection to giving the men a legal remedy in case they have reason to believe that the masters do not fulfil their part of the contract?—I think that they have now a legal remedy.

11170. What remedy have they?—Supposing that they fail in the interview with the master, which I have just now suggested, I think it is possible for them to summon the master, as having kept back part of their wages.

11171. As I understand you, this is not strictly a written contract between the master and the men, but a customary contract?—The usage of the country.

11172. Would there not be considerable difficulty in proving that in a court of law to be a contract?—Not the slightest; we have never found it so before the magistrate.

11173. Would there be any objection to giving the men redress, by providing that the justice-men should be employed not merely to take account of the tubs, but to have the tubs measured, or the weights inspected, as the case might be?—The justice-man can measure the tubs now, that is specially provided for; I take it, that if a tub were put on a pit-head of larger dimensions than those which were understood to be the dimensions when the men were engaged, that would void the contract, and be an illegal act on the part of the proprietor.

11174. If the men have a remedy so easy as you seem to consider, how is it that we have the complaints made that we have?—I believe, indeed I am quite certain, so far as our own collieries are concerned, that the complaints do not come from the men, but from the miners' delegates; I have taken considerable pains to ascertain that fact.

11175. I apprehend that some of the miners' delegates are lawyers?—I do not know that they are lawyers; they have legal advice.

11176. Is not Mr. M'Donald a lawyer; does he not understand the law?—He is not a lawyer, he may understand something of the law.

11177. Do you think that if there were a complete remedy open to the men, we should have these complaints?—I do not think that they come from the body of the miners.

11178. You stated that in some mines the royalty is paid upon the tubs?—Yes.

11179. Is that upon the whole of the tubs, or are the cancelled tubs excluded?—Upon the whole of the tubs.

11180. *Chairman.*] How do you account for this difference, of which you speak, between the delegates and the workmen?—I cannot account for it; I can only state that I have taken very great pains to ascertain the feelings of the work-people in our employ (and we employ a considerable number) and I have given the Committee the result.

11181. Have you spoken to many workmen on the subject?—I have spoken to a great many.

11182. Do you think that there would be no difficulty on their part, in telling you their real opinion?—I do not think there would, they are very frank and open, and if they have anything to complain of, they very soon let you know it.

11183. There is no doubt it might be a trouble, and a puzzle to them to change from one system to another?—I do not think that there would be any trouble to them, because they would not have the carrying of it out; the carrying of it out would rest with the proprietors chiefly, and most of the trouble would therefore rest with the proprietors.

11184. In such a case as that of which you spoke just now, do you see any practical objection to setting apart the tub as to which the dispute has arisen?—That is generally done, unless a great many such tubs come in the course of the day. The tub is generally left on the pit head, and there it is for the man to look at, and the reason why it is condemned is explained to the man.

11185. Is that, as far as you know, the habitual practice where a tub is objected to?—I believe so; but I must point out to the Committee that if the bulk of the men were sending up tubs in an improper condition it would be impossible to keep them all, because it would impede the work.

11186. The remedy, I presume, in that case for the employer is to discharge the man who constantly sends up tubs not properly filled?—That is often done; but when labour is so scarce as it is now we try and avoid it as much as we can.

11187. Can you give any reason why the tub was not set apart, in that case, which you have mentioned?—I cannot say that it was not set apart; I think very probably it was.

11188. If it had been set apart the refractory, or over zealous justice-man, would have had no reason to interfere, would he?—One would think he had no reason to interfere; but I can give you another instance of a tub being taken: I saw this tub at the time, and I certainly condemned it

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it myself; one of the colliers was coming up at the same time and I asked him to look at it; he did look at it and said that it was filled in so improper a manner that the workman did not deserve anything for it.

11189. If a dispute does arise as to either the weight or the measure of a tub, do not you think that the dispute is more easily settled where the difference is as to the weight than where it is as to the filling?—I do not think that it is so, because it is perfectly palpable to the eye whether a tub is properly filled or otherwise.

11190. But is it not rather a matter of opinion; is not the case this, that whereas when the question is by weight you have a certain standard that cannot be mistaken, when the difference is one as to the filling, it must be a matter of opinion for the eye and the judgment?—I think that it is impossible for the eye to err; indeed, in many of our pits, we never have the slightest difficulty of that kind at all; tubs come up from year's end to year's end, without the slightest difficulty whatever being raised on that question.

11191. As to the proportion of dry and wet coal, is there a great deal of wet mining in your district?—There is a great deal of wet mining in Lancashire, no doubt.

11192. Even if you retained the measuring for the wet coal, would it not be possible to use the weighing for the dry?—That would lead to very great complications, because different parts of the same pit would be paid by entirely different systems.

11193. You might divide the pit according to whether there were more wet or more dry; where the wet prevailed you might say, might you not, that shall be a measuring pit, and where the greater portion was dry, that shall be a weighing pit?—I think that it would be very inconvenient indeed to have two systems in the same district.

11194. Is it not sometimes alleged on behalf of the men that if they do get paid extra for wet coal, it is no more than a fair compensation for working in the wet?—No doubt, where a man worked in the wet he should have rather a higher price; but by the weighing system he would be paid a higher price, and also be paid for a greater weight.

11195. But is it the fact now that you pay them a higher rate when they work in a wet place?—No doubt that is so; there are two systems of paying, one by the scoreage for the hewing and the other by the yardage, and the compensation for the wet work is generally made in the yardage price; there is no doubt that a man has a higher rate of wages for wet work than for dry.

11196. But supposing that he was allowed to charge by weight he might get that compensation by the weighing?—He might get it then in two ways.

11197. Would it not be more convenient to let him have it by the weighing and to avoid the trouble as to the yardage?—No, I do not think it would, because the yardage is apt to vary from day to day, according to the difference in the labour.

11198. Do you think that they get a larger allowance for yardage than they would get for the difference in wet weight?—I think so.

11199. Have you ever seen any collieries where the system was by weight?—Yes.

11200. Comparing the two systems, which appears to you to give the greatest satisfaction?—I think that we have quite as few dissensions or disputes on that head in our district, where measuring prevails, as there are where weighing prevails, in the North of England.

11201. Have you ever been concerned in the management of collieries in the north?—No; I know the collieries in the north, but have never had the management of them.

11202. Mr. *Woods.*] With reference to these wages disputes before magistrates, can you say whether it is within your knowledge that they happen seldom or frequently in the petty sessions at Wigan?—Very seldom indeed.

11203. You made an observation about hewing; you said that if a tub was confiscated, the hewing price would not be paid upon that tub; did you mean that the yardage price would still be paid upon it?—I was not then referring to the yardage upon it; but, as a fact, the yardage price would be paid upon it.

11204. Then it would be a confiscation of a part of the wages only for that particular tub?—Yes.

11205. Are the Committee to understand that your objection to requiring payment by weight is that you dislike that legislative enactments should define the mode of carrying on practical mining operations, any more than seems to be absolutely requisite?—That is so.

11206. It is only to the principle, not to the detail, that you object?—Yes. As to safety, that of course is another thing altogether, and it may be properly legislated upon.

11207. Mr. *Foster.*] The parties from whom you have complaints with respect to the measuring, you stated were not men employed in the pits, but delegates; were they delegates employed by you, or were they parties strange to your colliery?—Quite strange; so far as I know no delegates have ever come before me from our collieries, or rather, I should say that none of the delegates who have appeared before this Committee have been employed by us.

11208. Amongst the delegates from whom you received complaints, were there any who were in your employ?—I really do not know whether any of our work-people are delegates or not; it is a matter into which I never inquire; they have a perfect right to become delegates if they like.

11209. I merely want to know if they were strangers that saw you, or your own people?—That would be a deputation, not delegates; when I speak of the delegates, I mean those who come prominently before the public; such men, for instance, as Mr. Pickard, who came here to give evidence; but any people who come to see me in reference to the works of our company, are, as a matter of course, our own people. But I wish to point out to the Committee that our own people have never complained to me that they have suffered an injustice by measuring instead of weighing.

11210. Should you listen to any complaints made on such a subject from parties not in your employment?—No, I should not; I should object to hear anybody who was not in our employment on the subject, because I do not approve of anybody interfering between myself and my own workpeople.

11211. Mr. *Greenall.*] I collect what you have said to result in this, that where you have matters in difference with your working people, they

they are questions on the subject of wages, and not questions with reference to the manner in which the mines are worked?—That is so.

11212. Mr. *Woods.*] Are the wages paid weekly or fortnightly in the Wigan district?—Fortnightly.

11213. Do the men play on every Monday which succeeds the Saturday's pay?—They do.

11214. If the play days were made more frequent, would it be an undesirable system to be adopted in the management of mines?—I think it would be very undesirable both for the proprietors and for the employed; for as it is now, after the fortnightly pay day they not only play on the Monday, which is entirely a blank day, but it is generally Wednesday or Thursday before the pit gets anything like into full work again. Tuesday often is only half a day, and Wednesday three quarters of a day. I am afraid if the pay days were made more frequent, the play days would become more frequent.

11215. Is it the fact that at your colliery the play days are frequently used for the repairing of the winding machinery, and so on?—Speaking of our own works, I would very much rather that the men would remain; the repairs are not so frequent as to require stoppage on that account.

11216. You inform the Committee, then, that it is not for the purposes of the employers of the colliery that there are those play days?—Certainly not.

11217. But that they have been established by a general concurrence, and the trade system between the employers and the workmen?—I think it has been more that the workpeople have taken the matter into their own hands, and refused to work on the Monday. I may say that I have tried to induce them to work on the Monday succeeding the pay Saturday, but I have never succeeded.

11218. Sir *Philip Egerton.*] The play Monday, once a fortnight, forms part of the contract between the masters and the men, does it not; it is an understood thing that there is to be a play Monday once a fortnight?—Scarcely so far as that; but it is understood so far as this, that I do not think we could prosecute a man for absenting himself on the Monday.

11219. Does it follow that if the wages were paid weekly, there must therefore be another play Monday?—Practically, it would be so.

11220. Why?—Because if the men have got some money in their pockets they begin to spend it. I have tried to induce them in different ways to work after the pay. I have paid on Thursday and on Friday, but I have never succeeded in getting a greater number of days' work; on the contrary, when I have paid earlier than the Saturday, it has generally resulted in less work. If I have paid on Friday, the men have played on Saturday as well as on Monday.

11221. In case the boon was given to the men of paying them weekly, which they ask for, would it follow, as a natural consequence, that they would absent themselves all the following Monday?—I do not say that it follows as a natural consequence, but I am satisfied that, practically, it would be so.

11222. If in granting that boon it was understood between the master and the men that the men should not absent themselves on Monday, would not that obviate the difficulty?—I do not think that we could enforce it at all. We should be at difference with the men, and it would lead to unpleasantness.

11223. You consider that the prayer for weekly wages is in fact a prayer for weekly play days as well?—Yes.

11224. *Chairman.*] Have you ever known a district where weekly wages are the rule?—No, I have not; I have known individual instances, but I never knew a district in which it prevailed.

11225. What has been the effect in the individual instances which you have known?—I do not think that I am sufficiently acquainted with them to give a very definite answer to that question; I should not like to say what the effect has been, not being positively certain.

11226. You do not suppose that with weekly wages the men would run riot, so to speak, every Monday, do you, as they do now every other Monday?—I believe they would.

11227. Have you ever heard the remedy for a pastrycook's boy, of letting him have the run of the shop and help himself?—The colliers are entirely their own masters; they have the run of the place, and they take a holyday, in reality, every afternoon.

11228. Do not you think that there would be less drinking and riot if there was a moderate play-day every Monday, than, as now, every other Monday?—I do not think that paying once a week would lessen that irregular conduct, but I am afraid that it would rather enhance it.

11229. Do you not think that the men would be more moderate in their enjoyment, even if they did take a holyday once a week?—I am afraid they would not,

11230. Mr. *Liddell.*] I do not understand a play-day once a fortnight to involve either drinking or riot, necessarily?—No.

11231. You do not wish to convey that impression to the Committee?—No, certainly not.

11232. Drunken men will always drink, and steady men will amuse themselves in a proper way?—Yes.

11233. Supposing that such circumstances arose in a workman's family, either from sickness or from any other cause, that he required an allowance, would he obtain such advance on application to the master?—If it seemed a case of necessity, he certainly would. Fortunately, I do not think there are many such cases; the men are earning high wages, and such cases are of rare occurrence.

11234. But the thing might occur?—Yes.

11235. And in such a case would any difficulty be thrown in the way of a man's obtaining the advance?—No.

11236. Practically, you say, applications are not often made for such an advance?—Scarcely ever.

11237. *Chairman.*] Then, as far as you know, the sole object of employers in preferring fortnightly to weekly payments, is to protect themselves against the idleness of the men?—I should not like to say that that is the sole object; that is the principal object. Besides that, however, it would involve a very serious additional staff in order to get out the wages sheets once a week. It is a very onerous matter, in collieries like ours, with 7,000 people employed, to get out the pay bills.

11238. Then the fortnightly system is some saving

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saving of trouble to the masters?—It is a great lessening of the trouble.

11239. There is no more trouble, probably, in making out a fortnightly than a weekly scheme of payments?—Very little additional trouble.

11240. Mr. *Greenall.*] Have your men ever made requests for weekly payments?—Never.

11241. With regard to men coming to you to seek employment, and new hands, have you ever had an instance where a man has objected to come into your employment because the wages were paid fortnightly?—I have never heard of one instance of that kind.

11242. Mr. *Foster.*] Do you know of any instance at all where the term for settlement of wages between master and men is laid down by Act of Parliament?—No, I do not.

11243. Do you see any reason why it should be so in collieries more than in any other employment?—I do not, certainly.

11244. Mr. *Woods.*] Is it a fair description of the fortnightly system to say that it is a trade custom?—Quite so.

11245. Are there any truck shops in your district?—None whatever.

11246. Do you consider that there are abundant means provided in the neighbourhood of Wigan, for national education?—I think abundant.

11247. Are there schools in every township?—I should say so without exception.

11248. Are there a great many schools in the neighbourhood of the collieries?—Yes, a great many.

11249. Do you know a parish where there is not one?—I do not.

11250. Have you seven or eight schools in the immediate neighbourhood of your works?—We have seven or eight schools under our own immediate auspices, that is to say, schools which are conducted by ourselves.

11251. Are the provisions of the Act strictly carried out in respect to the educational clauses, so far as you are concerned?—They are very strictly carried out.

11252. Do you agree with what Mr. Gilroy stated on the subject of the number and condition of the schools in and about the neighbourhood of Wigan?—I read Mr. Gilroy's evidence, and I believe it to be perfectly correct.

11253. What would be the effect if boys were not permitted to enter the mines till they were 12 years of age, and if their working hours were limited to eight hours a-day till they were 14 years of age?—I think that in some parts of the district it could have the effect of lessening the number of boys applying for work at the collieries, if they were prevented entirely from working between 10 and 12 years of age. Personally I have no strong feeling in favour of their being employed before they are 12 years of age, further than that if once a boy were employed at other work than a colliery you would scarcely ever get him to come to the colliery. I perhaps might go on to explain our own position as regards the employment of boys. In the whole of our collieries we have only 24 who are between the ages of 10 and 12; and I may say that the employment of those boys has been at the very special and earnest request of the parents. Up to about 10 or 12 months ago, and subsequent therefore to the passing of the last Act, I entirely refused to have any boys in the pit until they were 12 years of age. In one part of the works the men made very urgent requests to me that their sons should be allowed to go with them, and commence work between the ages of 10 and 12, the provisions of the Act of Parliament being of course complied with as regards education. I allowed that, but the effect is that it is only allowed in the case of 24 in the whole of our works. To show that the miners are anxious themselves that the boys should get into the mines early, I may mention that I had a case before me this very month, in which the register of the age of a boy was falsified to the extent of nearly 18 months in order to get him into the colliery. I brought that fact to the notice of the inspector of our district, and I asked him that he would, if he saw his way, cause a prosecution to be made.

11254. *Chairman.*] Was there a prosecution in that case?—It is now in the inspector's hands; it only happened on the 14th of this month.

11255. Mr. *Woods.*] Will you tell the Committee why you refused to employ boys between 10 and 12 years of age?—The chief reason was that it is a great deal of trouble to carry out the Educational Clauses of the Act of Parliament. We are bound to see that certificates are given of the boys attending a certain number of hours per week, and certain days per week. Practically, it is a great deal of trouble; and I thought it a better plan to let the boys stay on the top till they were 12 years of age, in order to avoid that trouble.

11256. Mr. *Foster.*] You would not recommend, would you, any further restrictions with reference to the employment of boys than those which are contained in the present Act?—I should not.

11257. And do you think that any further restrictions would be popular with the colliers?—I think they would be exceedingly unpopular.

11258. Do not you think that in the case of orphans the rule might work in many instances hardly in depriving them of early employment if such a restriction were made?—I think that both in the case of orphans and sons of widows it would be exceedingly hard, and certainly in a district like Lancashire, where we have various kinds of employments, it would tend to rob the mining interest of a supply of labour.

11259. I think you have stated already that the health and physical powers of the boys were not at all injuriously affected by the present mode of working in your district?—I think I have not stated that, but I have not the slighest hesitation in doing so; they are as healthy and lively as possible.

11260. Mr. *Kinnaird.*] I think you said that you found it very inconvenient to carry out the provisions of the Act of Parliament with respect to education?—Yes, in the case of boys between 10 and 12 years of age, certificates are required of their attendance at school for a certain number of hours and days per week, and if we had a great many boys it would involve a great deal of trouble to see that those certificates were duly obtained.

11261. It is desirable that the boys should have some education?—Certainly.

11262. And, therefore, though you find some inconvenience in carrying the system out, you would admit that it is most desirable that the boys should be educated?—Certainly; I should be

be an advocate for education up to a certain point.

11263. If there had not been a provision by Act of Parliament requiring education, probably they would have been without education at this time, to a large extent? — The boys attended school pretty well before the Act. I do not think it made very much difference.

11264. Except that now, it makes it necessary for them to attend school?—It was optional before, and now it is incumbent.

11265. Therefore the Act does some good?—I should not like to say that it did none.

11266. You say that the operatives themselves would be opposed to restrictions?—They would be opposed to greater restrictions than now exist.

11267. And they were opposed to the former restrictions probably? — I do not think much difficulty arose in that way.

11268. Men naturally like to bring in so much more grist to the mill, and they often do not look forward to the bringing up of the boys; they are not so sensitive, in fact, with regard to education, I suppose, as they are with regard to the increase in the amount of money which they earn?—Just so; they look to the bread first: still the education is very steadily progressing in the district; it has progressed very much more satisfactorily in the last few years than it did previously.

11269. You have seen a great improvement, I understand you to say, in the last few years? —Yes, within the last 10 or 12 years. A good while before the last Act of Parliament was passed, employers had for a good many years encouraged education as much as they could.

11270. You are aware that in some districts a great number were found at that time to be quite uneducated?—No doubt.

11271. Therefore the legislation was not unnecessary in regard to the education of those boys?—Where the population was more sparse, I have no doubt that less attention was paid to education than was proper.

11272. Sir *Philip Egerton.*] I think you stated that in consequence of the difficulties you found in complying with the Act, you employed no boys under 12 years of age?—For some time we employed no boys under 12; that is to say, up to about 12 months ago.

11273. Do you find any tendency on the part of the parents to over-state the ages of their boys, in order to get them employed in the mines at an early age?—The instance which I mentioned just now was a case of that kind. I have the certificate in my hand; that was a case where the certificate was falsified to the extent of 18 months.

11274. Do you require certificates of birth or baptism?—Yes, both the day of the month and the year had been altered in this case (*producing the certificate*). Underneath that is a correct copy.

11275. It is the custom, as I understand you, to require the production of the certificate of birth?—We invariably do so.

11276. Is that generally the case in other districts?—I think it is.

11277. *Chairman.*] Your objection to further restrictions is peculiar to your district, is it not, being founded upon the great competition that there is for the labour of boys under 12 years old?—I think that objection would be still greater in our district than in others, but I think that many of the same reasons apply throughout the whole of the mining districts.

11278. But in your own instance it is especially dependent upon that reason as I understand you? —That is one great reason.

11279. Practically, you will not yourself feel any great objection, as manager, to the restriction to the age of 12?—I should not like the restrictions to be greater than they now are. I think they are quite ample to provide for education for the colliers, and I think any further restriction would be an evil.

11280. But you have practically, of your own accord, extended the restriction up to 12 years of age?—We did that at one time, on account of the trouble, but I had to alter that, because I found it was tending against the interests, both of the workpeople and ourselves.

11281. You have only altered it to a very slight extent?—We have only altered it where absolutely required; if the restrictions were carried further, we should not have that option which we now have.

11282. Mr. *Woods.*] Do you agree with the evidence given by Mr. Forster, of Newcastle, that further restrictions would tend to place mining operations at a disadvantage as compared with other trades?—I think so.

11283. Mr. *Greenall.*] May I ask if that falsification of the certificate was made by the parent of the child?—By the parent of the child; at any rate, I should say that the false certificate was handed to us by the parent of the child; it must have been done either by him, or with his consent.

11284. Is that parent a miner? — He is a miner.

11285. Mr. *Woods.*] It was the father, I understand you to say?—The father, I believe.

11286. *Chairman.*] Is not this (*producing it*) the original document which was brought to you? —That is the document which was handed in to us.

11287. How is it that you have not given it to the inspector?—I sent that to the inspector as you will see by the letter appended, and he sent it back, I presume, having taken a copy.

11288. If he takes proceedings he will want the original back?—He will want it back again, as a matter of course; the inspector rather wants to lay it on me, but I do not think it is my province to prosecute in a case of that sort. I think it is so glaring a thing that it ought to be noticed by the inspector.

11289. Mr. *Woods.*] With reference to the employment of boys, do you agree with the evidence given by previous witnesses, that working in mines underground is a kind of labour more difficult to recruit than trades carried on above-ground, because persons who have not been accustomed to mining, object to send their children down?—That is so; you generally find that the boys who work in mines are the sons or near relatives of miners.

11290. A previous witness has stated that work done underground is more highly remunerative than work done above ground; is that within your experience?—That is so; certainly.

11291. *Chairman.*] Do you ever take certificates upon paper like that (*producing a paper*)? —When I am satisfied that it is the writing of a clergyman, I do so. We know all the clergymen, and know all their signatures very well.

11292. Mr. *Woods.*] With reference to the

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question of the employment of women, do you agree with the evidence given by Mr. Gilroy, generally as to the employment of women?—I do.

11293. Some of their labour, I suppose, is very hard work, filling coals out of stock, for instance?—Yes, it is hard work, some of it; but I should qualify that answer by saying that a very small proportion indeed of the labour performed by women is of that nature, the great bulk of them are employed in picking and dressing the coal, and greasing the tubs.

11294. Do you think it would be a hardship upon those women who desire to work near the pit's mouth if they were prevented by Act of Parliament from doing so?—I think it would. I think they ought not to be prevented from getting their living in any way they may elect.

11295. Do you agree with a former witness, who stated that the parents of young women frequently bring them and ask the overlookers to find them employment?—They are generally the daughters or wives of the *employés* on the works.

11296. Then, of course, it is your opinion that the workmen in your neighbourhood are in favour of their being so employed?—There is no doubt of it whatever.

11297. A Member of the Committee desires me to ask you if you think that there is any difference in the social or moral status of the women employed near the pits as compared with the other women resident in the same locality?—I think that they will bear very favourable comparison with any other women employed in the neighbourhood.

11298. Mr. *Kinnaird.*] When you answered that last question, were you speaking of the women as they are now, or of the women some years ago, when they were largely employed down the mines?—I understood the honourable Member's question to be this, "Whether the women employed on our pit banks now in the district would bear creditable comparison with women employed in other branches of labour now?" and my answer was, that they would bear a very favourable comparison.

11299. My question upon that is, do you speak of the women now?—Yes.

11300. How many years have you had experience of the subject?—I have known that district now about 12 or 13 years.

11301. There has been some improvement in that time, has there not?—I do not know that there has; I should not like to do the women the injustice to say there has; they were very well conducted then.

11302. Then you think it a very great pity to interfere with the employment of women in any way on mines?—On the surface.

11303. You see nothing incongruous in the dress which they are obliged to wear, or in the nature of their occupation?—The dress is perfectly suitable for the occupation, and it is certainly much more convenient and more healthy than the dress of the people employed in agriculture; most undoubtedly so.

11304. Then you really are in favour of the employment of women?—I should be very sorry to see the women prohibited from working on the pit bank.

11305. Inasmuch as they are, you say, favourably to be compared with women in other occupations, you must approve of this occupation for them?—I do.

11306. Sir *Philip Egerton.*] I do not understand you to say that you think it was a mistake prohibiting the employment of women in the pits?—No, I do not say that.

11307. Mr. *Kinnaird.*] That you entirely disapprove of?—I do.

11308. Mr. *Foster.*] Were you at all aware of the circumstances under which women were employed in pits?—It was before my time.

11309. You are not aware, perhaps, that it was confined very much to a very few colliery districts?—I believe so from what I have read.

11310. Is it your impression that there were very many colliery districts in which women never had been employed at all underground?—I believe, as a matter of fact, it was so.

11311. Mr. *Greenall.*] Is it your experience that the women you have seen employed on the pit's brow do not deteriorate in their character in consequence of that?—Certainly not, but quite the reverse. I should like to mention that during the cotton famine I took on, as a matter of charity, a good many workpeople who had been employed in the factories. Some of them were little puny persons and now they are hale, robust females, and would not go back on any account to work in the factories.

11312. And they have not become more immoral?—Certainly not. Very great injustice has been done to the women in the district, I am sure.

11313. Mr. *Woods.*] Is it your opinion that this question of the employment of women should be left to be settled by the collier men and collier women for themselves, and not be determined by Act of Parliament?—Clearly so.

11314. Mr. *Powell.*] Do you think that the women employed on the pit bank lose caste, in any degree, amongst persons in the same class of life?—Certainly not.

11315. Mr. *Woods.*] You are probably aware that a system of sub-inspectors, additional to the existing inspectors, has been petitioned for, do you consider that that system would work well?—I do not. I think it would work very badly.

11316. Supposing that a class of men of a different rank in life and a different status and education from the present inspectors; say, for instance, men analogous to the firemen in rank, were employed as sub-inspectors by the State, do you think that that would tend to create contention in the management of the mines, and lead to unsatisfactory, not to say disastrous, results?—I am quite satisfied that it would be so if any persons of a lower status than the present inspectors were employed. I am satisfied that if any body of men called sub-inspectors, who should be of a lower status than the existing inspectors were employed, it would lead to dissensions and quarrels between the masters and men continually, because the officers of the mines are exceedingly numerous; they are selected from the very best sources they possibly can be, and they would very naturally say they were quite as competent, or more competent, to judge than the persons who were put over them as sub-inspectors.

11317. Do you think that the appointment of a body of men of a different rank in society from the present inspectors to exercise the very great powers conferred by this Act would be undesirable?—I do.

11318. Do you agree with Mr. Gilroy in his description of the mode in which the management of a mine is carried on under-ground, and particularly

cularly as to the large number of persons who are employed in attending to the safety of the miners?—Yes, a very large number are so employed in every pit; it is clearly the interest of the coal-owners to avoid accidents so far as it is possible.

11319. Can you also state your agreement with previous witnesses, that where explosions do take place that circumstance places the colliery in which they occur at a very great disadvantage in the choice of men, and consequently in the rate of wages which have to be paid?—That is so, unfortunately, to a very great extent.

11320. Do you also agree with a previous witness, that the mere fine imposed for bad management bears no proportion to the fine so imposed by raising the rate of wages?—None whatever.

11321. Do you hold that the visits of the inspector, even if he gives you a favourable report upon your colliery, free you from any legal responsibility as to its management?—No; I hold that the owners and managers of the mines are entirely responsible for the management under the existing state of things.

11322. Can you go so far as to agree with Mr. Forster, a recent witness, in stating that a recommendation from the inspector, made against the manager's judgment, would not warrant or authorise the manager of the colliery to attend to the recommendation?—I should not attend to it if it were against my judgment.

11323. Mr. *Liddell.*] Is it your opinion that the amount of work thrown upon the inspector is more than he is able to perform?—I scarcely like to speak for the inspector, but I should not think so. I have never heard him complain that it is so. I may say that one of our inspectors is Mr. Dickinson; and I have read his evidence, to the effect that he can perfectly perform the work which is allotted to him.

11324. Does the inspector visit any colliery that he thinks fit, without let or hindrance, at any time that he thinks fit?—Clearly so. I never get any notice, and he comes down whenever he likes; sometimes I am there, and sometimes I am not.

11325. Is it within your knowledge that many applications are addressed to him on the part of men to interfere in the management or regulation of the colliery?—Of course I only know that by the evidence which I have seen of Mr. Dickenson's; it is a subject on which I have never, of course, held any conversation with the inspector. I should not feel it right to ask him why he came, or whether anybody had asked him to come.

11326. You never question the inspector as to his reasons for coming?—Certainly not.

11327. In regard to responsibility, have you any wish, as the manager of an important colliery, to be relieved of any portion of the responsibility which attaches to you, morally and legally, in the management of that colliery?—Certainly not.

11328. And do you think that any legislation that tended to relieve you of any portion of that responsibility must be mistaken legislation?—I think it would be very much so.

11329. Mr. *Greenall.*] You have no objection to the visits of the inspector, have you?—Not the slightest; I am very glad to see him when he likes to come.

11330. Have you known any instance where a miner has come to grief in consequence of the employer at the mine knowing that he had given information to the inspector, or requested the inspector to come?—I never knew of such a case.

11331. *Chairman.*] What do you conceive to be the duty and practice of inspectors as to visiting mines?—I scarcely like to pronounce upon the duties of inspectors; of course I think those are best defined by themselves; but I take it that their practice is, to go to look at whatever colliery they like, either from having some information about the colliery or from what they have seen at a prior visit, having first made themselves acquainted with that district, and to drop down wherever their services are required.

11332. Do you think it is their practice to visit collieries without any special invitation?—I think, as a rule, they go from some special reason which has come before them, either from previous knowledge or an intimation sent to them, or an accident having occurred.

11333. Your experience is no doubt chiefly taken from well-managed collieries; but supposing there was an ill-managed colliery, do you think that the management would be likely to be improved, and the probability of accidents diminished, by more frequent visits of the inspector?—I think that the inspectors can now visit sufficiently frequently, because, if the workpeople in any colliery (and they are quite sufficient judges) thought that the working of that colliery was unsafe, they would communicate with the inspector, and he would go and see it. There is another very important matter, which ought not to be overlooked, namely, that if the workpeople were dissatisfied with the state of things in any particular colliery (which we will assume to be badly managed), they would cease to work there, and would find labour in better managed collieries.

11334. As a matter of fact, are there not some collieries in which slovenly management as to ventilation and other matters goes on for a considerable time?—I should think, if that be so (I am not aware that it is), it is entirely the fault of the workpeople, because the inspector certainly could be called in at any moment.

11335. Though you may not be able to speak from knowledge, do not you believe, from what you have heard, that there are collieries which have gone on for years under a system of careless and slovenly management; I should not like to ask you about any particular colliery, but rather the general question?—I think that some collieries are better regulated than others; but I do not think that that is so much in regard to the question of safety as to the question of efficiency in the way of expense; a slovenly-managed colliery is a dearly-worked colliery.

11336. But there are many men who are penny wise and pound foolish?—No doubt. I should not like to go so far as to say that there are no badly-managed collieries, but if a colliery or mine is badly managed, I think the workpeople have the remedy in their own power, by ceasing to work for that colliery or mine.

11337. But do not you believe that the liability to accidents in ill-managed collieries would be diminished by more frequent visits of inspectors?—I think the inspectors can now go sufficiently often.

11338. Is it not within your knowledge that there are many collieries which they have never been to?—It is not within my knowledge, certainly.

11339. Supposing that to be the case, should you

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you think that that system of inspection was sufficient?—I think it would rather come to this, that the inspectors might have neglected their duty probably; that is a matter I should scarcely like to speak upon.

11340. Supposing that they had not time, what then?—Assuming that they had not time, I think it might be a reason for more inspectors to be appointed. I should like the Committee clearly to understand me, that I, personally, and the coalowners in our district, have no possible objection to there being more inspectors, or to more frequent visits of inspectors.

11341. Your objection is to a lower class of inspectors?—Precisely.

11342. You used the word "unfortunately" just now; you said, that where there was an accident it "unfortunately" led to a rise in wages?—It is, perhaps, a very proper thing that it does lead to it; I mean that it is unfortunate to the owners of that colliery that there should be an explosion.

11343. You do not mean to say that it is unfortunate in the interests of the public?—No.

11344. Is it a fact that when there has been an accident in a colliery, the rate of wages has risen in that colliery?—Very much indeed.

11345. Have you known that yourself?—I have unfortunately known it, very greatly to my cost.

11346. How long does that rise last?—I was at one time the manager, and before that the sub-manager, of the Ince Hall Collieries in Wigan, in which there were two very great explosions. At the time of the last, I was the under-viewer there; and I know, as a fact, that after the accident it cost that company many thousands a year more for the working of that particular seam of coal than it did before the accident. I would go further, and say that even now, at the present moment, they have considerably more to pay for the working of that coal than I, who work the adjoining colliery, have to pay for mine, and that is now 12 years ago.

11347. The increased expense is still continued?—It is still going on.

11348. Mr. *Liddell.*] We have been told by a very able inspector, Mr. Dickenson, that he has for some time been engaged in his district in inducing managers to adopt improvements of various kinds in their collieries, both as to working and as to ventilation; I want to ask you, as a manager of collieries, this question: supposing the inspector made a representation to you, and advised an improved system of working, should you give that representation due consideration, or should you resent any such representation on the part of the inspector?—I should give it the most grave deliberation; and if I found that, in my opinion, his suggestion was a good one, after looking at it in the most careful manner, I would adopt it. If I thought it was not a good one, I would tell him the grounds upon which I disapproved of it; and there the matter would rest, I presume.

11349. The value that you would attach to the representation of an inspector would materially depend upon the opinion you had formed of his capabilities?—Quite so; and also upon his knowledge or otherwise of the particular circumstances of the case on which he was advising.

11350. Then I presume you would attach more importance to the advice of an inspector who had been some time in the district than you would to that of a man who had come fresh into the district?—Certainly.

11351. Mr. *Greenall.*] You employ a great number of colliers; do you find them a changing body, or do they remain long in one employment?—As to their habits, they are very migratory in our district; perhaps I should say more from one colliery to another than in the way of going out of the district altogether.

11352. They leave the colliery rather than the county?—Yes.

11353. Sir *Philip Egerton.*] Your answers with regard to the sufficiency of the number of inspectors had reference mainly to your own district, I presume?—My answers had reference, of course, mostly to my own district.

11354. You do not wish to express any opinion as to the general question whether the number of inspectors is sufficient?—I would rather not do so; I think that is best left to the inspectors themselves.

11355. Mr. *Liddell.*] We have heard something about ill-managed collieries; is it your opinion that, supposing them to exist, it would be the duty of the inspector to visit such collieries until he could effect some change in the management?—I think that an inspector, once knowing that a colliery was managed in a manner which he considered was dangerous, should not rest until it was made safe.

11356. Mr. *Greenall.*] But I think you have indicated the opinion that a colliery having such a reputation, has hanging over it a constant penalty in the payment of higher wages?—Certainly that is so; and, in point of fact, the men would not work there. They really are sufficient judges themselves; and if they know that a mine is not safe they will not work in it, because there is plenty of employment for them elsewhere.

11357. Mr. *Liddell.*] In the event of a serious accident occurring, is it found that the rate of wages asked rises for some time subsequent to the accident?—Undoubtedly that is so.

11358. Mr. *Fawcett.*] Are the wages very much higher in the Dukinfield Colliery than in others?—I should imagine that the Dukinfield Colliery has not yet got to work again since the accident.

11359. But there have been repeated accidents there, have there not?—You may, at any rate, assume, as an undoubted rule, that the wages do rise after an accident.

11360. Mr. *Woods.*] Supposing a very severe accident to occur in a colliery, would it be a fair description of the sequences to say that the best class of workmen and the steadiest would be desirous of removing from that colliery?—No doubt.

11361. And would their places have to be filled by an inferior, a rougher, and lower class of men?—That is so.

11362. And would the result of that be, that the owner or manager of that colliery would be paying a higher price per ton for getting his coal than if there had never been an explosion?—Yes; and not only that, but the actual price of hewing per score is actually higher afterwards. I named the Ince Hall Colliery just now as being to the point, and it is so at the present day.

11363. You entirely agree with Mr. Gilroy, the manager of the Ince Hall Coal and Cannel Company,

Company, in his general views on that question?—I do.

11364. Mr. *Powell.*] Would not the same remark apply to the higher branches of labour, to the overlookers, or whatever they are called, at the collieries?—The higher classes are so intimately connected with the management themselves, that I do not think that it applies so much to them.

11365. Mr. *Woods.*] Supposing you were paying 50,000*l.* a-year in wages, a very small percentage would be a very heavy penalty for bad management, would it not?—Yes.

11366. Have you ever heard of any complaints arising from the mode in which coroners' inquests are conducted?—No, I have not.

11367. Do you believe that the jurors are fairly summoned?—I think they are.

11368. As a matter of fact, who has the summoning of the jurors?—The police.

11369. Do you think that it would be a desirable state of things that half the jurors should be operative miners and the other half-owners of collieries?—I do not think it would; I think they are far better chosen generally; I think that they would naturally be antagonistic to one another if that plan were adopted, and that the system at present is far better.

11370. In case one half of the jury were composed of miners, do you think it a reasonable and fair proposition that the other half should be composed of owners?—I do, certainly.

11371. Do you think that that would lead to more satisfactory conclusions and verdicts than the present system?—I do not.

11372. Mr. *Fawcett.*] Does not it often happen that the greater number on the jury know nothing about the practical working of a mine?—It has not been so in any inquests with which I have been connected, or which have come under my observation.

11733. Mr. *Powell.*] Do you think that the colliers who work in the mines, the actual hewers I mean, are so far conversant with the comprehensive theory of working mines as to be good judges on that question?—They are perfectly good judges, so far as their own working places are concerned; they can tell whether they are safe or dangerous, either with regard to the propping or with regard to the ventilation; but beyond that I should not think them good judges.

11374. Supposing that a question were to arise as to whether the ventilation of a mine was conducted on sound principles?—That is another point altogether; a man may be perfectly well able to judge whether his own place has a sufficient amount of fresh air coming in to prevent the accumulation of gases; and where you have a sufficient number of men together, you can arrive at a general conclusion as to the sufficiency or not of the ventilation.

11375. Should you think a working miner competent to say whether the system of ventilation in a mine was so imperfect as to amount to negligence on the part of the owner?—No; I should not say that a working miner was the best judge as to the general system.

11376. Consequently, in regard to some of these fearful accidents that occur where a great number of lives are lost, probably owing to some defect in the theory of ventilation, you would not consider a working collier the best judge?—No, but I should not like to go so far as to say that the heavy accidents do arise generally from an unsound principle of ventilation.

11377. Mr. *Fawcett.*] I have been asked to put this question to you; does it not often happen (take, for instance, the case of the Edmund's Colliery, where there was an explosion) that men are paid a large bonus to work a very dangerous part of a mine, and that they, by risking their own lives, risk the lives of a great many others, this bonus being a temptation to them to risk their lives?—I have never known such a bonus paid within my experience, certainly.

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11378. I thought that your evidence went rather to show that men were paid more for working a very dangerous place?—That was not what I meant, but that after an accident has occurred, whether the mine be safe or dangerous at the then existing time, a larger amount of wages has to be paid to the work people; the mine may be perfectly safe, but may have a bad reputation.

11379. But in the case of a colliery having a bad name, that bad name arises from the fact that there are dangerous places it it, does it not?—No; from the fact that an explosion has taken place there, it does not follow that there are then dangerous places there; the probability is, that there are none.

11380. From your experience, does it not follow that where one explosion has occurred, there is a chance of another?—There is always a chance; and I would say that in any mine there is a chance of an explosion, and the best scientific arrangements cannot prevent it; but an explosion having once occurred, I should say that the probability of another is diminished, not enhanced.

11381. That theory is completely falsified by the Dukinfield Colliery, is it not, because there have been five explosions there?—I should not like to give any evidence about the Dukinfield Colliery, because I do not know anything of the facts.

11382. Mr. *Woods.*] Are the sub-officers for the management of the collieries chosen with great care, and, as a rule, are they efficient, and is it in the owners' interest to choose the best men for firemen and other sub-officials underground?—The sub-officers of the mine are chosen with the greatest care. I would speak both for our own collieries, and also for all those that I have seen; they are chosen with great care, and it is most undoubtedly the interest of the owners of the mines to have the most efficient men who can possibly be obtained.

11383. And who do you think ought to have the responsibility of chosing them?—The owners and managers of the collieries, undoubtedly.

11384. Do you think that the persons who are responsible legally for an explosion, should have the responsibility of choosing the officers who are to manage the colliery under them?—Yes.

11385. Is it, in fact, right that the viewer, who draws designs for the ventilation, should have exclusive choice of the officers who are to carry out his own plans?—Undoubtedly.

11386. Has your attention been directed to the evidence of a person from your own neighhood. He was asked by the Member for Brighton, "Why did you relinquish the place which you held?" and his answer is, "I relinquished it because I considered that whenever an accident happens, the firemen are forced to be brought to the test, and my principles led me, wherever I could see an inferior point, to speak about it, and, as I said before, that does not suit; it is not very pleasant to deal with the

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underlooker in that way. *Q.* Then you really gave it up, because you felt it uncomfortable to do your duty?—*A.* That is it. *Q.* You were thwarted in doing your duty; that is one chief reason that induced you to give it up?—*A.* Yes." —That is the evidence of a person named Baxendale.

11387. Was that man in your employment at the time of which he spoke?—Not at the time of which he spoke, but some years ago he was; and my attention was called to the evidence by reading it in the local papers.

11388. Have you any observations to make on that?—I have. I wish to observe that at the time Baxendale was a fireman, some years ago (I suppose about six years ago now), he was in the employ of the Earl of Crawford and Balcarres, to the management of whose collieries I succeeded immediately after that time. This man was a fireman in a large colliery there; he neglected his work, and was prosecuted for neglecting his work, and he absconded. Shortly after I became manager of the collieries he returned; the prosecution was renewed, and he was put in prison, if I am not mistaken, and therefore my attention was very forcibly drawn to the subject when I found that the tenor of the man's evidence went to show that proper persons were not employed as firemen.

11389. The circumstance of his having been prosecuted for neglect of duty in those collieries which you manage, being within your knowledge?—Yes.

11390. In answer to a question, 1966, which was put by the Chairman, a witness stated this, "In some of our principal mines the men have to work naked because the mine is so hot, and that is through a deficiency of ventilation." Have you made any observations on the temperature of your mines?—I have, my special attention having been called to that evidence. A mine of which I have the management, and of which I am part owner, is specially named, and I have satisfied myself as to the reliability or otherwise of that evidence, which went to the effect that the mine was so hot that the miners had to work naked.

11391. The witness said that he spoke of the California Pit in the Arney Mine; is that one of your coal pits?—It is.

11392. Have you made any observations on the temperature of that coal pit?—I have.

11393. What are the results?—The mean temperature in the return air courses (I took it very carefully) is 66 degrees of heat. I also took the temperature in the extreme working place, the greatest distance from the shaft.

11394. How far?—About 2,500 yards from the shaft; and I found the temperature at that point (the men were working in it; the drawers were coming in and out; and the coal was in process of hewing) 73½ degrees. I could not find a person in the whole pit who was working without his clothes; on the contrary, they were clad in the way in which miners usually are, with their trousers on, and in most instances, their flannel shirts; the men working in the actual places had not their flannel shirts on; that was a question of convenience, in order that they might be less impeded, and not on account of the temperature.

11395. What was the temperature on the surface?—Sixty-seven and a half degrees at the time that I returned: that is to say, there was only six degrees difference between the extreme working place of the colliery and the surface.

11396. In taking the temperature, what time of day did you select?—The time of day happened to be 12 o'clock at noon when I returned to the surface. I took the temperature before I went down also. It did not vary very materially. I should like to add also, that the amount of ventilation at that time passing through the mine was upwards of 106,000 cubic feet per minute.

11397. With reference to the length of time for which the men and boys work, one witness was asked this question, "Can you give the Committee the hours of work, beginning with the men; what time do the men usually go down the pit?" his answer was, "They go down at four in the morning, and they stay till from four o'clock to six o'clock at night." Have you any observation to make on that?—I have; the men are bound to go down the pit before six, that is the only rule. On an average they go down about half-past five, and the extreme time at which they come out is half-past four in the afternoon; out of that time there are one and a half hours allowed for meals, so that the actual number of working hours is about nine and a half.

11398. Is that 9½ reckoned over 10½ days in the fortnight or more?—Certainly not more than 10 to 11. I should say 10 would be the average in the fortnight.

11399. What are the hours of the boys?—The hours of the boys are as nearly as possible the same as those of the men; there is very little difference indeed.

11400. *Chairman.*] On which side is the difference?—There would be a shade less on the part of the boys, but it is scarcely appreciable.

11401. Mr. *Woods.*] What is the time at which the boys go down, and the time at which they return?—I have a paper here which shows them as going down at half-past five in the morning, and coming up at half-past four in the afternoon, an hour and a-half being taken off that for meal-times. In two instances I see that it is half-past five o'clock in the morning for going down, and five o'clock for coming up, which is half-an-hour longer. That refers both to men and boys, and, as a rule, you may assume that they go down and come up about the same time.

11402. Is that the average?—That is at particular pits.

11403. Not individual cases, but an average?—Yes, at certain pits.

11404. Mr. *Fawcett.*] Are the hours of labour which you have mentioned, those which prevail generally throughout your district?—They are.

11405. Some witnesses have told us that the boys stop down longer than the men; can you explain that?—In our case they do not stop down longer than the men, as a rule; in isolated cases they may; sometimes a collier may get a quantity of coal down, and the drawer may stop in to bring it to the shunt before leaving, but, as a rule, the hours are very much about the same.

Mr. ISAIAH BOOTH, called in; and Examined.

11406. Mr. *Woods.*] ARE you a mining engineer and manager of the Oak Chamber and Chadderton, and other collieries, near Oldham, and managing partner of the Mostyn Colliery in Flintshire?—I am.

11407. Is there any difficulty, in your opinion, in the system of payment by measure?—There is not.

11408. Do you agree with the former witness's statement on that subject?—I do; and perhaps I might add to them that we pay the landlords in the neighbourhood of Oldham entirely by measure. I do not think we have a single lease taken per acre, or by any other way but the measure.

11409. How is the measure estimated?—The measure is estimated by the cubical contents of the tub; the coal is sold also by that measure, and the landlord takes a proportionate rate of that.

11410. Then the payment by measure to the men, and the payment by measure to the landlord, are estimated by the same instrument, namely, the tub?—Yes.

11411. And the sale of the coal frequently, also?—Yes, it is almost universal in that district.

11412. *Chairman.*] The landlords you say, in this case, are paid by measure?—Yes.

11413. In other cases landlords are paid by weight, are they not?—I do not know any who are paid by weight.

11414. You have never been concerned in any district where the payment was by weight, have you?—I know one in the neighbourhood of Ashton, the neighbourhood of Dukinfield.

11415. Comparing the two systems, which should you say was the best?—It was a very small place in which I had my experience of the weighing. So much a ton was paid for some small pillars we got, and the reason for that was to make a distinction whether we got the whole of the pillars or not.

11416. You have had very little experience of payment by weight?—None at all, I may say.

11417. Mr. *Woods.*] Where you made your agreement to pay by measure, you paid by measure, and where you made your agreement to pay by weight, you paid by weight?—That has been established 100 years in the Chamber Colliery.

11418. Do you recommend the fortnightly payment of wages?—Yes; my reason for advocating fortnightly wages is this, more particularly; we have no particular play days, the men do not take the Monday after pay day as a holiday in our district, but the worst part of the colliers, two-thirds, perhaps, remain out, and are spending money and idling about; the better portion of them come. If they were paid once a week, the same thing would occur with us, as I know does occur in the Burnley and Blackburn districts, the owners complained, and the wives complain, of this payment taking place once a week, and two-thirds of the men never come to work on the Monday after the pay; I think that that would be the effect of the establishment of weekly payments generally; and, also, it would be an immense trouble to the deputy managers of the mines, and would take them off other work, and so far as measuring up for the colliers, and looking to what was due to them went, it might take them off from the general inspection of the mine, which might lead ultimately to danger in the mine.

11419. Are there any truck shops in your neighbourhood?—No.

11420. As to boys; what, in your opinion, would be the consequences of preventing boys from working until they were 12 years of age?—I think we have a difficulty even now; but I think if you put an additional restriction on them to prevent them working before they were 12 years of age, we should hardly get them into the mines at all, and the evil might be something that I should not like to look at. In our district the mines are very thin; the thickness of the seam is often 18 inches; there you want a smaller class of boys, and there continually you have a difficulty in getting them. These seams are worked now, and they are worked profitably; but if you keep the boys out till they are 12 years of age they will get work in the machine shops, and as half-timers in the factories, and they will never get down into the mines at all.

11421. Then I presume it is your opinion that if it is the intention of the Legislature to prevent boys from working until they have arrived at a greater age, that should not be done, so as to operate upon one to trade to the prejudice of other trades?—Certainly not.

11422. Do you agree with former witnesses in the opinions which they have entertained, that working in a mine is a highly dangerous employment, and tends to interfere with the supply of labour to that trade?—It certainly has an influence that way, it cannot be denied.

11423. Mr. *Fawcett.*] I suppose you think it would benefit the boys, if in coal mines, up to 12 or 13 years of age, they worked upon half-time in the same way as they do in factories?—It is totally impracticable in a colliery.

11424. It would not be an impracticable thing, perhaps, for them to work on alternate days?—Certainly not if you had a relay of them.

11425. And there would be no more difficulty in your getting a relay than cotton manufactories would there?—But cotton manufactories do not do so I think.

11426. But they work on half-time, and they are obliged to get a greater number of boys?—But there is greater difficulty in getting boys into mines than into factories.

11427. You get them now into mines, however?—We find a great scarcity.

11428. Should you feel any strong objection to the introduction of the half-time system, or the alternate day system, if all trades in your district were placed in the same position, so that all should be on an equality?—I should not like to say that; I should feel an objection to it, but it would be a great inconvenience to the colliery. You cannot take men from the top of the pit, down the shaft to their working places, unless the boys are there to be taken down with the men, and in the same way they must be brought up with the men; they are not to be trusted to go by themselves, from the surface to their working places, because in the course of that change they would pass all kinds of machinery, and be exposed to danger.

11429. If you had the alternate day system, that difficuly would be obviated, would it not?—

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If a boy were out one day, he would not like coming the next.

11430. That has not been found, has it?—The thing has never been tried, I think.

11431. I suppose you would admit that that system would have a great effect in improving the boys?—It ought to have, and no doubt it would have

11432. If all colliery owners were placed in the same position, the loss occasioned by the adoption of that system could not ultimately fall upon them, but upon the consumers of coal; that is to say, if coal cost more to raise, the consumer would have to pay more, and the loss would not be borne by you?—That does not always follow.

11433. It must follow, must it not?—I do not think that is the result of my experience.

11434. That is theoretically the result?—I do not think it is so practically. We have been many a time paying high wages for coals, and selling them at a low price; for instance, during the cotton famine.

11435. Mr. *Liddell.*] Do I rightly understand from your last answer that the large amount of labour thrown upon the labour market in consequence of the cotton famine, did not tend in any way to reduce the wages paid to colliers?—No, it did not tend in any way to reduce the wages paid to colliers; it was the demand for coals which fell off, and still the labour did not.

11436. That falling off of the demand lowered the price, and the extra amount of hands thrown out of work not being accustomed to that description of labour did not find employment?—Exactly so. I may, perhaps, mention that I am a member of the Board of Guardians for the Oldham union, and there I find a great objection on the part of anyone having a relationship to the children in the union to their even coming into the mines. To men receiving relief there I have frequently said, "Well, if you will come down into the mines, I will give you 18 *s.* a week;" but it is very rarely that they will come, because they have not been accustomed to it.

11437. Then, practically, the supply of labour is a limited supply, owing to the circumstances which you have just mentioned?—Yes, no doubt; and also it is a limited supply throughout Lancashire now in all trades, not only in collieries, but also in machine shops, foundries, and cotton factories; there is no question about that.

11438. Owing to the great demand, and the great activity of trade?—Yes.

11439. Has education had much to do with it?—I do not think it has particularly, out of our district.

11440. You were asked just now a question with regard to the factories, comparing the half time system in factories with the labour of boys in mines, have not the factories the additional advantage that they employ girls?—Certainly they have.

11441. And it is, I understand you, your opinion that if the labour of boys was prohibited between the ages of 10 and 12, some of the thin seams which you now work at a profit, could not be worked?—Certainly that would be the result.

11442. May I ask in reference to these thin seams, whether you use the coal cutting machine much?—No, we have not it in our district at all.

11443. Do you think that it might be employed with advantage in those thin seams?—The mines are too steep; the inclination being as great as one to two-and-a-half, or one to three.

11444. Mr. *Greenall.*] Have the colliers' wages increased much in Lancashire lately?—Very much; they have increased within the last five years 25 per cent. in our district.

11445. Mr. *Foster.*] The coal cutting machine would not enable you to dispense with the labour of boys?—Certainly not.

11446. Mr. *Greenall.*] What are the daily average wages which the colliers are earning?—I took out four sets of our own men for the fortnight ending the 10th of May; the first set made 3 *l.* 19 *s.* each, for 120 hours; the second set 2 *l.* 8 *s.* 4 *d.*, for 100 hours; and the third 3 *l.* 7 *s.* 6 *d.*, for 108 hours; and another set 3 *l.* 13 *s.* 4 *d.*, for 108 hours. It is hard work, but they get 1 *s.* an hour out of it, and they have something to pay out, and it leaves them clear 7 *s.* 9 *d.* if they work the full days. They are out always at one o'clock every Saturday with us, and they do not always go down on the Monday after the pay, and sometimes not on the Tuesday after the pay, and some of them will not get down on the Wednesday after the pay.

11447. Mr. *Fawcett.*] I thought you said they would have 1 *s.* an hour; but according to your figures it does not make 6 *d.*?—That may be so, if you reckon the time that they are down the pit.

11448. But that is all work, is it not?—No; it may take them a quarter of an hour or half an hour to get to their places and back, and then their meal time has to be taken out as well.

11449. But if it takes a man two hours to get to his work, it takes so much out of his working day?—I am speaking of what they could earn per hour at their work. I do not want to mislead the Committee for one moment; I simply gave the results of our pay list for one fortnight, and I say that that shows what a man can earn whilst at his work.

11450. But according to your own figures, you say that one man earns in the fortnight 2 *l.* 8 *s.* 4 *d.*, another 3 *l.* 13 *s.* 4 *d.*, and another 3 *l.* 19 *s.*; taking the highest estimate, that only brings it up to 9 *d.* an hour, according to your own figures?—That is the time they are down the pit, betwixt coming to the pit top, going to their work, and coming out again; what I have given is the result of what they have positively received.

11451. Mr. *Woods.*] Does that estimate which you have handed in include the meal times?—Certainly it does.

11452. *Chairman.*] What are the deductions you make from the hundred hours?—The first case was 120 hours, at 3 *l.* 19 *s.*

11453. How many hours do you deduct from that, for going down and meal times?—I am supposing that you take two hours a day out of it for those purposes.

11454. Is it for 10 days, or for how many days is it?—You must take the 12 days; it would be 100 hours.

11455. That does not bring it up to 1 *s.* the working hour?—No. What I say is this, that any man can, with his pick, in our mines, earn his 1 *s.* an hour.

11456. Mr. *Fawcett.*] Your figures do not prove it?—Those figures show the wages of one particular fortnight.

11457. Mr. *Liddell.*] I suppose you take seven or eight hours as about the average number of hours that a workman can work?—Yes.

11458. Can

11458. Can he earn 7*s.* or 8*s.* in that time?—Yes.

11459. And do many of them do it?—Yes.

11460. Mr. *Woods.*] In these figures which you have handed in, you have given three different sets of men?—Yes.

11461. It does not follow that because a man goes down the pit he is working with his pick?—No.

11462. But you have estimated the earnings upon the hours that the men disappear below the surface of the ground?—Yes.

11463. And there will be good men and bad men amongst them?—Yes.

11464. There is no contradiction between your statement of the price paid per hour for being down the pit, and the price per hour which a good man can earn when at work?—No; what I wished to state to the Committee was, that this is an absolute abstract from the wages up to such and such a day, and then I stated that a good man, with his pick, could earn 1*s.* an hour whilst he was at it.

11465. Mr. *Powell.*] You mean when the man was at the face of the coal?—Yes.

11466. Mr. *Greenall.*] I understand you to mean that the good workman, standing at the face with the tool in his hands can, while he is working, earn 1*s.* an hour?—Yes, exactly, and that is putting it perhaps a little narrower than I meant to put it. I meant to put it that whilst the man is there for three hours he shall earn 3*s.*, and that man shall cut his coals and lay a length of rails along, in addition to walling.

11467. What will that man get in the fortnight?—It will entirely depend upon circumstances; perhaps some days of the week he will stay out; it is very rarely that men will work continuously, day by day, to fill up the fortnight.

11468. Mr. *Foster.*] In addition to the fortnightly play-Monday, I suppose, there is a certain degree of irregularity amongst the men at other times?—Yes; in our district we do not recognise the play-Monday, and we try all we can to do away with it. We have no play-Monday, in fact, but some of the men will not come to work until the Tuesday, or perhaps the Wednesday morning after the pay.

11469. Therefore you have not the same regular attendance of working colliers in a pit as you find of men attending machinery in a factory?—Certainly not.

11470. From long habit the colliers take a half day, or a whole day, as it suits them, much when they please?—Certainly.

11471. Therefore it does render the difficulty of having a half-time system, or an alternate day system, with respect to boys working in mines, where there is such an irregularity, on the part of men, much greater than in factories where there is employment six days in the week, and of a more regular character?—It does.

11472. Do you think that the irregular nature of the work, in collieries, would place serious difficulties in the way of the half-time system, or the alternate day system?—I really do not see how it could be carried out.

11473. Mr. *Powell.*] What do you find to be the state of education amongst the boys, when they apply for occupation at the age of 10?—I can scarcely answer that question, because, as a rule, we do not employ the boys in our collieries; the getters themselves employ those boys.

11474. Have you no means of ascertaining the condition of education amongst the boys?—Certainly not beyond this, that our deputies have instructions according to the Act of Parliament, that the boys are not to be employed, except in accordance with the terms of the Act, that is to say, unless they can read and write, and certificates are furnished.

11475. Are there any schools in your district?—Yes; it is a very populous district; we are in the centre, betwixt Manchester and Oldham.

11476. Do the coal proprietors take any interest in the schools?—Not more than the rest of the employers of labour do.

11477. Is it not the case that the employers of labour generally take some interest in the education of their men?—Generally they do; but a colliery situated near a large town like Manchester, and in the midst of a populous district, like South Lancashire, is a very different concern from a colliery in the north of England, or some special mining district.

11478. But what circumstances are there which make it less important that a colliery proprietor in your district should take an interest in education, than it is in any other part of the country?—We will take Messrs. Potters' colliery at Cramlington, for instance; perhaps there is not a house within some miles of the colliery, and they provide not only schools, but cottages for those people to live in. In this district, however, it is not so, and there is no necessity at all for such provision. There are schools in abundance, and generally they are subscribed to in the usual way in which such schools are kept up.

11479. But there is not much interest taken by the colliery proprietors in education, you say?—You cannot say that they have an interest in it beyond that which other masters have.

11480. What should you say are the ordinary wages which a miner has for himself in a week, after paying all expenses?—If you were to take a wage book and look over the wages of any set of men, you would not find two alike.

11481. Is there no governing average?—I should say not; they are not content with less than 5*s.* or 6*s.* a-day, running their 12 days in the fortnight.

11482. Do you mean that those are generally their gross receipts?—I mean their net receipts after paying off their stoppages for candles, oil, and gunpowder.

11483. And their drawers?—A full drawer takes up 3*s.* 6*d.*, and a man 5*s.*; those are what they call stints.

11484. Mr. *Woods.*] What do you mean by "stints," is it a limitation of the amount of work that a man may do?—You can hardly say what it is; they limit you to so many hours in the fortnight.

11485. Mr. *Fawcett.*] It is required by Act of Parliament that any boy between 10 and 12 years of age shall produce a certificate that he can read and write before he can be employed, or else a certificate that he is attending school?—Yes.

11486. Do you take any trouble to see that those requirements of the Act are complied with?—Personally not, but written instructions are given to the whole of my underlookers that they shall not employ or allow any boys to go down the pit unless they have such certificates.

11487. Do you know whether those instructions of yours are obeyed?—Yes; at least I have seen instances of it.

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11488. Have you seen instances where they have not been obeyed?—No; I have known instances where the underlookers have brought me such certificates, and asked me if they were sufficient.

11489. Have you known cases in your colliery in which boys were sent away for not producing certificates?—I have known cases in which they have been refused employment for that reason.

11490. I think it will be approximately correct to say that you handed in just now an average of 3*l.* per hundred hours as wages earned, taking your own figures?—Yes.

11491. Considering the number of hours that the man was down the pit, and taking the meal-times and the number of hours occupied in going to and from his work, you would say that he would get 8*d.* an hour?—That would be the average amount of his earnings.

11492. That would really represent his earnings more correctly than to say he got 1*s.* an hour, would it not?—I had no intention of saying that he got 1*s.* an hour. I said that he could earn it by hard work, and I do not say that upon my own simple assertion, but it is a question upon which I have had conversation with some of the men, and the men have told me themselves that they could do it.

11493. Then 8*d.* an hour is about the average earnings of the men in your colliery?—Yes, you may put it down so.

11494. *Chairman.*] How long would a man be able to work at that rate; not many hours, I suppose?—I should not like to fix what colliers can do; you would find it astonishing to see the amount of work they can do when they have a contract on, and how little they do when they are on the same work per day.

11495. Mr. *Liddell.*] You spoke just now of cases in which cottage accommodation was furnished to the workmen; am I right in supposing that cottage accommodation forms part of the wages?—No; in our district we do not find cottage accommodation to any of the colliers; we have cottages belonging to the colliery, and which are occupied by the workmen of the colliery, both under-ground workmen and surface workmen, but we collect those rents from them in the same way that we should do from a person that did not work for us.

11496. What I want to know is this: whether, supposing you furnished that cottage accommodation, you would pay less wages?—We should hope to do so, certainly.

11497. Am I not right in supposing that, in cases where house-room is furnished to the workmen, it forms part of the wages, and that if that house-room were not given the wages would be considerably higher?—Certainly; it ought to be so.

11498. Have you ever compared the rate of wages that you, who do not find house accommodation, pay, with the rate of wages prevailing in another district, where they do find house accommodation;—Not for some time; but the amount of 2*s.* 6*d.* a week is a thing you can hardly get at betwixt the rate of wages in one district and the rate in another; 2*s.* 6*d.*, the rent of a cottage, would be so trifling an amount that it would not tell in that comparison.

11499. Mr. *Woods.*] I omitted to ask you whether you could state approximately the number of persons employed at all your collieries?—I should say somewhere about 3,000.

11500. Do you employ women about your collieries?—No, we have none.

11501. With regard to sub-inspectors, have you any objection to sub-inspectors being appointed by Government?—Certainly.

11502. Those sub-inspectors being men with lower salaries than the present inspectors, and probably of a different rank in life?—Yes; I do not see the good of employing such men as those: I do not see what object could be accomplished, or what possible good could be attained by appointing a class of men of that description. They could but be something equal (I suppose that is what is asked for) to our firemen and our underlookers. What they would have to do would amount, I suppose, to a general inspection of a colliery, or a pit, for which purpose they would go into every working place; at least that is what I have seen suggested in some of the evidence given before this Committee. Well, that would be simply no inspection at all; it would be no better than the fireman's inspection, who is sent round every morning, indeed it would not be half so good as that. Such a sub-inspector could not for one moment direct, or even suggest any alteration in the ventilation; he could only see what state the places were in. I do not see what good a class of men of that description could do, except to remove the responsibility from the managers and owners of the collieries (which I suppose is a very undesirable thing), into the hands of a class of officials not appointed by them.

11503. What, in your opinion, is the general cause of accidents in mines?—It depends upon what sort of accidents are referred to.

11504. Accidents from explosive gas, for instance?—Explosions of gas may be caused by 20 things; what they are actually caused by is always matter of evidence at the time. The shutting or opening of a door, the men taking off their lamp-tops, or carelessness in any way might cause such an accident, in spite of all the ability and ingenuity displayed in the management, or in the general arrangements of the colliery.

11505. Do you think that the subjecting of sub-agents, or firemen, to a competitive examination, or an examination before a scientific board, would be a desirable or an undesirable process?—I do not think that it would do any good at all. I do not see but what the manager of the colliery, or the owner of the colliery, one of the two, must be a competent judge of the servants he is going to employ. It is to his interest to employ a class of men that will do their duty, and can do their duty. If there is any explosion it is not only a great loss to him, but it is a great stain upon his character.

11506. Your own acquaintance is chiefly with the neighbourhood of Oldham, and not in the neighbourhood of Wigan; is the evidence which was given about schools, and the condition of the mixed employments at Wigan, generally applicable to the neighbourhood of Oldham?—Yes, it generally applies perhaps more to our district than to Wigan, because we have less of collieries and more of other sorts of employment.

11507. Machine trades, for example?—Yes, large machine manufactories. I suppose Messrs. Platt & Company must employ some 8,000 or 9,000 hands in that way.

11508. Former witnesses have given in evidence that the effect of the Act for the Inspection of Mines has been to cause the worst managed

managed collieries to be pulled up to the condition of the better managed, and that the better managed collieries are being improved gradually, do you agree with that?—Yes; I have no doubt that the inspection, so far as it has gone, has done good in the case of some collieries, and that is proved, really, by the proceedings which the inspectors themselves take. You very rarely find them going near a well managed colliery unless on special occasions, whereas you will find them visiting a colliery which you might say was badly managed, in which the discipline is lax, or which from any other cause is not as it ought to be, very much oftener than one that is better managed.

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11509. Mr. *Liddell.*] So that when we hear it alleged that an inspector has not visited a particular colliery, that is, we may argue, an evidence that that colliery is pretty well managed?—Yes. There is no doubt that all the inspectors are as anxious as the colliery proprietors are to prevent accidents in their districts; they all wish to show in their own districts as favourable a result as they possibly can; that they are very anxious to do so there is no doubt.

Mr. Thomas Knowles, called in; and Examined.

Mr. *T. Knowles.*

11510. Mr. *Powell.*] I believe you are Mayor of Wigan?—I am.

11511. Are you a partner in collieries in Lancashire in that neighbourhood?—Yes.

11512. Of the firm of Pearson and Knowles?—Yes.

11513. Can you give us the names of the collieries?—We have collieries in three different townships, Ince Hall Colliery in the township of Ince, Hindley Hall Colliery in Hindley, and Barley Brook Colliery in the borough of Wigan.

11514. How many persons have you in your employ?—From 900 to 1,000 persons.

11515. I believe you have been long connected with the coal trade?—Yes.

11516. You have therefore a thorough knowledge of the working of the coal trade?—Yes.

11517. Can you give the Committee any account of the state of education in your district?—I have got it put into a statistical form showing the number of schools of different denominations. I have obtained the statement as Mayor of Wigan, and I can put it in if the Committee desire. (*The Witness handed in the Statement,* vide *Appendix.*) In addition to that there are other schools which are now building in the district, and they are chiefly supported by the coal trade, particularly in the township of Ince, which has a population of upwards of 10,000 people. I may say that there are other schools supported there chiefly by the coal trade, except what is got by Government grant to the National Schools.

11518. I believe that an addition to the extent of accommodation for 250 children is being made by the firm of which you are a partner?—The additional accommodation will serve 350 children. We (myself and my partner) are spending some 1,500*l.* on the new schools. We have schools already within half a mile of the works, but they are inadequate, and are quite filled. There are more night schools in addition to those; after the passing of the last Act Messrs. Case & Morris, the Wigan Coal and Iron Company, the Ince Hall Coal and Cannel Company, and ourselves, undertook the responsibility of providing those and employing a certificated master in order to educate boys between the ages of 10 and 12; we found that we had only to pay the master's salary for half a year, because after that time the funds of the boys were sufficient to pay not only the salary of the master, but the salary of an assistant master.

11519. There is a desire then for education, I presume, on the part of the people, and the intention on the part of the proprietors is to co-operate in that desire?—The proprietors do everything they can in our district, both for boys and for girls, in providing day schools, Sunday schools, and Church accommodation as well.

11520. Under the Mines Regulation Act it is required that before any boy between the ages of 10 and 12 is employed in a mine, the owner of the mine shall "obtain a certificate under the hand of a competent schoolmaster, that such boy is able to read and write." What is the class of schoolmasters that you obtain that certificate from?—We have always obtained them from a certificated master; in fact, I have with me all the certificates we have received from the passing of the Act to the present time. If they are over 10 years of age and under 12, we first obtain a certificate that they can read and write, and then a second certificate that they attend school for the number of hours specified by Act of Parliament. We only employ boys if they can read and write; and, in fact, we invariably find that the boys can read and write. I do not know a single instance of a boy who cannot, and there are not many of the men who cannot read and write; those who cannot are the old men. I had to get a petition signed by them some time ago, and I insisted on all the men signing their names. Some of them said, "I will make my mark;" I said, "I will not allow that, you must write your name." They said that they could only do it very clumsily, because their hands were hard with work. I said, "Never mind, write it as well as you can." We found that out of 1,000 men there were only five or six who could not write their own names, and those were old men.

11521. From what you have said, I presume that you would consider the marriage register not a fair test?—No; the men often object to write their names, because they think that they write a very clumsy hand.

11522. Mr. *Liddell.*] Did I rightly understand you to say that in cases where the boys had a certificate that they could read and write, you insisted upon their attending school also up to the age of 12?—Yes.

11523. *Chairman.*] You are aware that it is not necessary that you should do so?—I am aware that it is not necessary, but a school is provided, and it is attended by children between the ages of 10 and 12; we do not employ any boys at all between the ages of 10 and 12 who cannot read and write, and who do not attend school.

11524. Mr. *Powell.*] You dismiss a boy who refuses to attend?—Yes.

11525. Have you many boys under 12 years of age?—We have not many. I find that there is a disposition generally on the part of people not to send them till 12, except in extreme cases,

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the case, for instance, of a widow or a father of a family which is a large family; but I think that the practice will wear itself out ultimately.

11526. Is there a reluctance on the part of the colliery proprietors to employ boys before they are 12 years old?—There is a disposition to do so at present, but I do not think that they care much about it, if the restriction is only made compulsory on other trades also. If the parents felt a disposition for the children to go to work, they would send them to other kinds of work, and then we should lose them altogether from the mines.

11527. You are not in favour of any change of the law upon that subject, as I gather from you?—No, I think that the thing will work its own cure ultimately.

11528. Should you be disposed to postpone the time of full labour to a later age than is now adopted?—We could not have a system of half-time in collieries.

11529. But you have now schools where the boys attend whilst they are employed at the collieries?—They go to those schools after their working hours.

11530. *Chairman.*] You mean that they do not work a less number of hours on those days than the other days?—No.

11531. Mr. *Powell.*] You think that any alteration of the state of the law on that subject will not promote more education, but will rather drive the boys to other trades?—Yes, I think that it would really lessen their means of education.

11532. What do you find as to the physical condition of the boys; as to their health and spirits?—The boys are all healthy and strong; a great deal more so than those employed in mechanical fitting shops, or the cotton operatives.

11533. You think that the boys are not reluctant to become colliery boys?—No; but if they once get employed at other labour, then they get into the groove, and you can never turn them back to mining.

11534. After a certain age is passed, you find that a boy does not become habituated to the labour of the pit?—No; and if he does not go into the pit early he never makes so good a collier as one who has been brought up to it.

11535. Have you any females employed on your pit bank?—We have.

11536. Can you approximate to their number?—Thirty eight.

11537. Are they single or married?—They are chiefly single; there are one or two widows (two, I believe) amongst them.

11538. Do you find them well-conducted women?—Very well conducted; in fact, more so than cotton operatives, as a rule.

11539. As regards their health, are they strong and vigorous women?—They are strong and vigorous; and when I used to engage them myself, and in that way to come more in contact with them, I have frequently asked them why they did not go to the mills instead of the pit bank, and the answer has been in many cases, "I have tried the mills, but my health will not permit me to remain there;" and I have often noticed myself how strong and healthy they have looked after working on the pit bank for some time.

11540. Do you entertain a strong objection to a prohibition by law of the employment of women?—I think it would be interfering with the freedom of labour. I believe too that the thing would cure itself in that case ultimately, as well as in the case of the boys. There are the cotton mills, and places of service, and all kinds of work in the district which the women could go to, if they thought proper, instead of working on the pit bank. The principal reason for retaining their services at the collieries is this; they do the work of boys, and those boys are wanted below.

11541. If you were to dismiss the women you would fill up their places by a corresponding number of boys?—Yes, the women's work is generally in the waggons or boats; they have to trim and dress the coal, and they are more careful at that work than boys would be, as a rule; boys require more looking after.

11542. Which would be the higher rate of wages; that which you pay the women, or what you would have to pay the boys if they did the work of the women?—I do not think there would be much difference; we pay the women on an average 1 *s.* 6 *d.* a day, and we should have to pay as much to the boys, because else they would go into the pit and get it. The boys, however, would not be so careful, especially in regard to avoiding accidents from the waggons, as a rule, as the women, and then too the women are quicker in picking out little bits of dross, and so on.

11543. Mr. *Fawcett.*] You invariably require these certificates to be produced from boys employed between the ages of 10 and 12?—Yes; every month.

11544. Other colliery owners do not imitate your good example, perhaps?—They ought to do so; I cannot speak however about other collieries.

11545. Can you say whether generally throughout your district other colliery proprietors make the same praiseworthy efforts for the education of their people as you make?—Yes, all the principal coal proprietors do; I do not know a single school, or church, or chapel of any denomination in the neighbourhood of Wigan, or in the Wigan district, that has not been for many years principally supported by colliery owners.

11546. I think you stated that your chief objection to the introduction of the half-time system was that, if that system were introduced, the boys would be drafted off to other trades?—The half-time system could not work with the boys in collieries, without creating idleness with the men, for this reason; the boys are employed as drawers, and if the boys must knock off work at half-time, you must have the same thing in the case of the men. If the boys knock off at half-time in a factory, you merely stop the machine; but in the case of a colliery, you stop the men from working altogether.

11547. How would the system of alternate days for boys answer?—The men would have to work alternate days too, if that principle were adopted.

11548. Could you not get a double relay?—We could not; we cannot get enough now.

11549. You do not employ many boys under the age of 12 now, as I understand you?—No.

11550. Would you object to a restriction preventing their employment until that age?—Not if it were extended to other trades.

11551. If it were made compulsory on other trades in your district, you would not object to a restriction of their employment?—No.

11552. Mr. *Woods.*] That is to say, there would

would be no objection raised by the coal-owners to the restriction?—Yes, that is what I mean.

11553. Mr. *Fawcett.*] You would not object to such a restriction; you think it would cause no very serious hindrance to the work of a colliery?—Not if the boys were not employed at anything else; but it would be a great hardship upon some of the parents, because there are a great many employed at other trades than the coal trade in the district under the age of 12.

11554. Mr. *Liddell.*] I did not understand you to mean just now that you undertook to say that other colliery owners and managers were careless in asking for those certificates which the Act requires?—No, I do not know that they are. I know that there are some of them that do not employ boys under the age of 12 now, for the simple reason that they will not have the trouble of asking for the certificates; but I should fancy that they are all equally as careful as our firm in getting the certificate, because it is required by the Act of Parliament.

11555. It is their direct interest to be careful for the sake of avoiding the penalties?—Every employer or manager has a direct interest in having his colliery well conducted, and where there is an Act of Parliament in having it carried out.

11556. And in avoiding the penalties which might be imposed for not observing the Act?—Yes; and not only that, but the men can do more work, of course, and the whole thing goes on more comfortably, and it is better in every respect when the concern is well regulated.

11557. Do you work the thin seams in connection with the thicker seams in your collieries?—We work perhaps seven or eight different seams; we do not work anything less than four feet thick, and we work up to seven and a-half feet.

11558. But you are quite aware, probably, that in Lancashire there are seams worked of about half that thickness, and even less than that?—Yes.

11559. Are you aware of the evidence which has been given with regard to the employment of small boys there?—Yes, no doubt it is of very great importance there; they could never get those thin seams worked except by small boys.

11560. It would be a serious impediment in that part of the coal trade to prohibit the employment of boys?—Yes, and it would also be a national loss if you did not get those mines worked; and if boys did not go early into those mines they never would go into them at all.

11561. Mr. *Powell.*] What is your feeling about the appointment of a number of sub-inspectors to strengthen the present staff of inspectors?—I do not see what good they would do; and I am afraid they would do a good deal of injury. It would not do to appoint an inferior class of men to those whom we have now; and we ought to have those that could not be tampered with either by the men or by the employers.

11562. Have you any other objections to make to such a plan?—My general objection to it is that I think we ought not to have an inferior class of men to those whom we have at present.

11563. You think that the colliery proprietors generally would not have so much confidence in sub-inspectors as they have in the inspectors?—They could not; and accidents would be more frequent, I think, instead of being less frequent.

11564. On what ground do you think that would be the result?—These men would go interfering with the collieries a great deal, and the managers under-ground would get careless in consequence; they would feel a kind of relief from the responsibility being taken off their shoulders, and I am afraid that they would get generally into careless ways.

11565. You think that that feeling of relief from responsibility on their part would be a source of danger?—Yes, if their work were done by the sub-inspectors I think it would be so.

11566. Do you think that the workpeople are shy in making any remarks now to the inspector, when he visits your collieries?—Not at all.

11567. The Lancashire collier is an outspoken man, I believe?—Yes; if anything was wrong, and our manager or under-ground manager would not remedy it, the men would come to me at once.

11568. But would the men feel free to speak to the inspector on the subject, if they wished?—Undoubtedly; when the inspector has visited our mine, he has come quite unawares; indeed sometimes I have not known till a week after that he has been there.

11569. He would hear anything that a working collier had to say to him, I suppose?—Undoubtedly; and the collier has as free access to the inspector as I have.

11570. Have you known any cases in your pit where a working man has spoken to an inspector?—No; at least I cannot call any to mind. The inspector has come and gone into the working places of the men, and the men have had an opportunity of saying anything to him that they wished.

11571. And conversations may have taken place between him and the men, I presume, of which you have heard nothing?—Undoubtedly; in fact, what the inspector has had to say at our colliery has been to the men, as a rule; he has full liberty to go anywhere he thinks proper.

11572. As to the coroners' inquests, do you think that there is any injustice in the present system of summary juries?—No, I think not; you will generally find that the jurors in the mining districts, from their long residence in the district, know something about mining; you will also find that many of them have been colliers themselves. Sometimes steady colliers, before they leave the pits, start by keeping a little shop, or a beer shop; then they get from that to a public house, and then give over getting coal altogether. They, of course, have a good knowledge of the colliery working, and those are the men that in our district, and I think in most of the colliery districts, are called to serve as jurors.

11573. Then many of those who act as jurors in your district are somewhat dependent on the colliers?—Yes.

11574. And they would consequently have strong sympathies with the colliers?—Yes; and I may say that I have been surprised to hear the practical questions which have been put generally by the jurors.

11575. To what do you attribute the accidents which have occurred in your district?—In a great measure to the carelessness of the men themselves. By way of illustration I will

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mention an accident which happened in our colliery a short time ago, in which a poor fellow lost his life. There is a rule which specifies that the men shall bring their powder down in a tin bottle. This man had stuck up his candle above his clothes, and in his clothes was this powder-bottle. The candle tumbled and set his clothes on fire; he went to put out the fire, the bottle exploded, and the man only lived two or three days. When I came to examine how it was that the fire got to the bottle, a boy said he had told him that the bottle was split, and wanted soldering. But there are many accidents that occur from falls of roof; many occur in consequence of a man not spragging. Only a week or two ago a man was hewing, who had plenty of sprags in his place, but neglected to use them; the underlooker went into his place; he did not get the man out of the way in time, but the coal caught him, and he only lived a couple of days after.

11576. Mr. *Woods.*] What are sprags?—They are props to keep up the coal. That man had nothing to do but to put them under the coal, and that would have saved his life. There are many accidents that occur in that manner.

11577. Mr. *Powell.*] Some accidents, no doubt, occur from defective ventilation?—There are some, no doubt, which occur from that cause.

11578. During the time of the cotton famine, had you many hand-loom weavers who came down in order to become colliers?—No; I do not recollect any.

11579. Nor during the preceding year?—No.

11580. What is your opinion about the system of weighing?—I think it would be impracticable to weigh, and, in fact, I have never heard of any colliers in our district asking for it. The delegates seem to be the only people that say anything about it. There is only one colliery that I know in our district where they have promised to weigh, and that is the Ince Hall Company's Colliery.

11581. Do you think that the workpeople generally wish for the change?—I have never been asked to make a change.

11582. And you are well conversant with the feelings of the workpeople, I presume?—Yes; I do not believe that any of the colliers, or, if any, only very few indeed, wish for a change.

11583. How often do you pay your workpeople?—Every fortnight.

11584. Do you think that that is a sufficiently frequent payment?—Yes; it has never been asked by the men that we should do anything otherwise. I think that if we paid weekly, idleness among many of the men would result oftener than it does now.

11585. Is there any such thing as Play Tuesday with you?—I may say that I have taken out the figures, and I find that on an average of 12 months our men work 9¼ days in the fortnight.

11586. Mr. *Woods.*] Have you made any observations as to the number of hours per day for which they work?—They average a little under 40 hours a week; about half-an-hour under.

11587. Mr. *Powell.*] When you say 40 hours, do you mean that 40 hours is the length of time for which they are out of the light of day?—The number of hours that they are down the pit. There are many of them that do not work all the time that they are down the pit. I see it has been given in evidence before this Committee by some one, that they are kept down, and must do a certain amount of work. That is not so. They are not allowed to come up before one o'clock, it is true, but many of them do not work half that time. One man during that time might get only his 2 *s.*, while another man would earn 8 *s.* or 10 *s.* We do not allow them to come up before that time, for this reason; we have frequently found that if the delegates could get amongst them at the pit bottom as soon as they were down in the morning, they would get them all together there and stop the men from going to their work, after keeping them there an hour. We adopted the system of their not coming up before one o'clock to prevent that sort of thing.

11588. Have you any such thing as truck shops?—No.

11589. You pay the full wages?—Yes.

11590. *Chairman.*] You say that the average hours of work of the workmen in your pit is 40 hours a week, as I understand you?—Half an hour under 40 hours.

11591. How much do you make that a day?—They work 9¼ days in a fortnight; that is the average, taking all the men for the 12 months.

11592. Mr. *Powell.*] What should you say are the average wages of a sturdy industrious collier?—The average wages, taking all our colliers together, are 5 *s.* 6 *d.* a day; that is the gross clear wages, taking all the men together; but we have some that can get, and do get, 1 *s.* an hour for every hour they are at work. Some men, however, do not get nearly so much as that.

11593. *Chairman.*] What do you mean by "gross clear wages"?—The wages that come to the man after he has paid his drawer, and all his expenses.

11594. Mr. *Powell.*] And after he has paid for his candles, and so on, I presume?—Yes.

Thursday, 28th June 1866.

MEMBERS PRESENT:

Mr. Bruce.	Mr. Greenall.
Mr. Clive.	Mr. Kinnaird.
General Dunne.	Mr. Liddell.
Sir Philip Egerton.	Mr. Neate.
Mr. Fawcett.	Mr. Woods.
Mr. Wm. Orme Foster.	

CHARLES NEATE, Esq., in the Chair.

THOMAS WILLIAM JEFFCOCK, Esq., called in; and Examined.

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11595. Mr. *Liddell.*] You are one of the firm of Brown & Jeffcock, I believe, Mining Engineers of Sheffield and Barnsley?—Yes.

11596. You have several collieries under your superintendence in Yorkshire, I believe?—Yes.

11597. Will you state in what parts of Yorkshire your collieries are situated?—In the South Yorkshire District.

11598. All of them?—Yes. We are connected with others in Derbyshire and with one in Leicestershire.

11599. Have you the management yourself of any particular colliery or collieries in the South Yorkshire District?—Yes.

11600. How long have you had charge of those collieries?—I entered into partnership with Mr. Brown in 1860, six years ago.

11601. Since that time have you taken an active part in the management of the affairs of the company in which you are a partner?—Yes.

11602. Will you state to the Committee whether you have weighing-machines placed at the pit bank in your collieries?—We have.

11603. In all of them?—Yes, in all that we are connected with.

11604. Are the coals regularly weighed, and is the true quantity ascertained?—Yes.

11605. Have the workmen a check-weigher on the pit bank?—Yes.

11606. Is he always there, or is it optional with them whether he is placed there or not?—He is there always.

11607. So that there is a complete check on the part of the workmen, and justice is done between masters and men?—Yes.

11608. Is it within your knowledge whether many disputes have arisen between the banksman and the check-weighman?—I do not know of one; at least, not in the collieries that we have been connected with.

11609. Have you had any complaints from the workmen, or from the workmen's representative, the check-weigher, of any want of accuracy in the weights or in the machine?—No.

11610. Then you have never, I presume, had occasion to have it tested?—The weight is frequently tested.

11611. By whom?—By either the weighman or the engineer at the colliery.

11612. It is not liable to inspection by any authorised public officer, such as the inspector of weights and measures, is it?—No.

11613. Should you have any objection, in the event of its accuracy being disputed, to subject it to inspection by such an officer?—No, not at all.

11614. General *Dunne.*] Is there any difficulty in applying weighing-machines, for the purpose of weighing coals, to the case of any colliery that you have ever seen?—No, I do not think there is.

11615. Do you think it a preferable plan to measuring by tubs?—I should always recommend weighing.

11616. Mr. *Liddell.*] But the practice of weighing is a custom in the district of which you are speaking?—Yes; I am speaking now of our own district.

11617. But in the event of the other method being in general use in any particular district, and being the custom of the country, should you recommend a change?—Certainly not. I do not think it calls for legislative interference at all.

11618. Mr. *Fawcett.*] Do you know why, in some places, they persist in the system of measurement?—I may state that I know cases at the Sheffield collieries now where they do not weigh, but pay by the tub; and the men prefer it, because they have been accustomed to it all their lives at that particular place.

11619. Mr. *Liddell.*] Is that what is called a wet mine, or is the coal a dry coal?—The places vary. There are two seams which they work, the Silkstone seam and the Park Gate seam; some places are wet and some places are dry.

11620. In the event of the coal being generally wet, do you think that a system of measurement is preferable to a system of weighing?—Of course, in weighing, you have a little difference between dry coal and wet coal.

11621. Would that difference be known and allowed for in the arrangements in the contract between the workmen and the master?—Not in weighing, I think.

11622. Wet coal, of course, would weigh heavier than dry coal?—Yes.

11623. But would the workmen have no allowance made in consideration of its being a wet coal?—The tub is gauged at a certain weight at each colliery, and the coal, as a rule, does not vary much.

11624. But supposing you had two tubs, one filled with wet coal and the other with dry coal, would

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would there not be an important difference between the two when they came to be weighed?—There would be a difference, but I do not think to any great extent.

11625. I want to know whether, in case of there being a difference, any allowance would be made on account of the coal being wet?—No.

11626. General *Dunne.*] Would it not be an advantage to the collier to have that wet coal weighed?—It would.

11627. But, notwithstanding that, I understand you clearly to say that you prefer weighing to the other system?—In this particular district I do, but I would not make any change.

11628. I do not want to know what you politically would do, but I want to know whether you think the weighing system a better system in the country with which you are acquainted yourself?—Yes, I do.

11629. Mr. *Liddell.*] How often do you pay your workmen, speaking of your own collieries?—Once a week lately.

11630. Since when have you paid them once a week?—Since about the beginning of the year.

11631. Previously to that change had you paid them fortnightly?—Yes.

11632. Will you state to the Committee the reasons which induced you to adopt that change to weekly payments?—We adopted it because the men insisted upon it.

11633. The fortnightly wages did not suit them, and they insisted upon a change?—Yes.

11634. Did they take any steps to enforce that demand, or did you voluntarily accede to their requests?—There was some dispute at first, but afterwards the masters agreed to it.

11635. Were there any threats of a strike?—Yes.

11636. Were they carried into effect?—I think not.

11637. Previously to the beginning of this year what was the mode of payment when you paid fortnightly; did you pay on the Saturday?—Yes, on the Saturday; the measurements were taken up to Thursday, and the men were paid on Saturday.

11638. What was the custom of the men in regard to what is called play-time, when they were paid fortnightly?—They used to have a play, Monday generally

11639. No other day than that?—No.

11640. Did they work a whole day on the Saturday?—Some of the men were out on the Saturday; in fact, sometimes on the Tuesday there used to be only three parts of the men in; the men would vary, of course, in that respect.

11641. Since the adoption of weekly payments, have you found any change in regard to the time that the men take for their own leisure, or the play-time, as it is called?—At the commencement they did not adopt a play-day at all, but now we find that the Monday is getting worse every week; both Mondays in the fortnight are being taken.

11642. Have you reason to suppose that the men will relapse into their former practice of not working at all on the Monday?—I think they will.

11643. And that will result, with the system of weekly payments, in the loss of an additional day in the fortnight?—Yes.

11644. Will that be productive of any inconvenient results?—It will; the coalowner wishes to get as much coal from his mine as he possibly can in as short a time as he can.

11645. To that extent the system of weekly payments will lessen the supply?—Yes.

11646. Will that affect the price of coal?—I think it will.

11647. You have not observed to what extent it has done so already, perhaps?—No.

11648. May I ask whether it is your opinion, although you have apparently been compelled to adopt this change, that the fortnightly system of payment is preferable to the weekly?—Yes, no doubt.

11649. And you would wish to revert to it if you could?—Yes, I should.

11650. You are only deterred from doing so by the prospect of disputes with your workmen, I suppose?—Yes.

11651. Mr. *Fawcett.*] Are the men almost unanimously in favour of weekly payment?—Some are; I think the majority are.

11652. On what ground are they in favour of it?—They say that they have to get their provisions on sufferance, as it were, and they cannot make so much of their money; but I think that a collier in our district, as a rule, is much better off if he only gets his wages once a fortnight, because he is generally drinking, whenever he has money in his pocket, if he has nothing else to do.

11653. The men do not suppose that, in the aggregate, they get more wages by weekly payments, do they?—No, I think not.

11654. Mr. *Liddell.*] Do you wish those words which you have just used to stand; do you mean that the colliers are in the habit of drinking when they have money in their pockets?—Yes, I think so; I believe that their wives would prefer fortnightly pays. As a rule, colliers are very fond of getting into a public-house, not only on the Monday, but on Sundays. You always find that at the end of a week there is better work done than at the beginning.

11655. Do you make that statement, as to the wives being in favour of the fortnightly payment, from actual knowledge on the subject?—It is from inquiries I have made as to their feelings, not from actual conversation with the wives themselves.

11656. You have directed inquiries to be made as to the feelings of the wives with reference to these weekly payments?—Yes.

11657. And that is the result of those inquiries?—Yes.

11658. Mr. *Fawcett.*] Of course you would not think of asking the Legislature to interfere in a question like this, but you would leave it to be arranged between the master and the men?—No doubt.

11659. General *Dunne.*] Is it the employers or the men that prefer the weekly payment?—The men.

11660. Why do the employers object to it?—One reason, of course, is that it takes just double the work to make up the account under the weekly system.

11661. Then, in fact, it is chiefly for the convenience of the employers that you advocate the fortnightly system?—That is the chief reason, perhaps.

11662. Are you aware that in agricultural labour almost all the payments are made weekly?—Yes.

11663. Why should weekly payment have a more demoralizing effect on colliers than on agricultural

agricultural labourers? — Colliers have more money a good deal than agricultural labourers.

11664. Do not you think it would be much better to allow the employers to make their bargain with the men, and pay them as they like? —If the employers like to make any arrangements of their own, they are quite at liberty to do so, but I do not think they ought to be compelled to pay the men weekly.

11665. Is there any objection, where such an agreement is made between the employer and the employed, to the men being paid weekly, or do you think that the employer should, on account of its supposed immorality, change the system?—No; I think an employer is quite at liberty to please himself in the matter.

11666. Do not you think that he should also study the convenience of the workmen?—Yes, but I think it is against the workmen to be paid weekly; I think he has more money to spare if he is paid fortnightly.

11667. The men do not think so themselves, do they?—No; because the majority of them like to have money in their pockets to go to public-houses.

11668. Sir *Philip Egerton.*] I think you stated that one reason why the men preferred the weekly pay was, that when they were paid fortnightly, they had to get their provisions on credit? —Yes, that is their statement.

11669. Is credit given at the public-houses as well as at the shops?—It used to be to a great extent.

11670. Do not you think a man given to drinking, would obtain his drink on credit as well as his provisions?—I do not think that he would be allowed to go beyond a certain point; it would all depend upon the publican, of course; in some places credit in the way of drink prevails more than in others.

11671. You think that if they have their pay weekly, the men having the money in their hands, cannot resist the temptation of spending it?—I think so.

11672. Mr. *Liddell.*] Have you many strangers in your employ, or are they chiefly natives of the district?—Chiefly, I believe, they are natives of the district, but there are strangers that come from different parts; I believe that South Yorkshire is considered one of the best districts for colliers.

11673. The men have been described to us as a very well-to-do class, taking them as a whole; is that a correct representation?—They could be very well-to-do if they liked; I think they can earn plenty of money if they choose.

11674. Are their houses comfortable?—Some are kept well, and others of course are not; but as a rule they are comfortable houses.

11675. Are their wives a thrifty and industrious set of women, for the most part?—I think they are.

11676. Of course the comfort of a collier's house and household depends materially upon the wife?—Yes, of course they vary; some are good and some are bad wives.

11677. Are they a saving class?—I think, as a rule, they are not certainly.

11678. Have they established provident societies, sick clubs, and institutions of that kind amongst themselves?—Yes; there is a sick club at almost every colliery, I think.

11679. Are those clubs well supported for the most part?—Yes; I may mention, by way of illustration, one colliery, which is called Lundhill Colliery.

11680. Is that one of your own collieries?—It is one that we have the management of; we have no interest in it; I can put in a copy of the Rules and Regulations of the Lundhill Accident Society, if the Committee desire it.

11681. Could you state shortly the objects of the society?—It is called the Lundhill Colliery Accident Club.

11682. My question had reference to sick clubs?—They are principally, I think, with the men themselves.

11683. The masters, you mean, have nothing to do with the sick clubs; they are entirely conducted and supported by the workmen themselves?—They are supported in some cases by the masters as well, I believe.

11684. Are there sick clubs in connection with any of your own collieries, of which you could speak from your own knowledge?—I could not exactly give the particulars of the working of the sick clubs.

11685. You cannot perhaps say what proportion the payment from the masters bears to that from the men?—I cannot.

11686. Have you anything to say with reference to accident clubs, with which the masters and managers are connected?—I think it is a very good thing to establish one at every colliery.

11687. You have such in connection with your collieries?—Yes.

11688. Will you state what amount of management or money payment there is on the part of the masters with reference to the accident clubs? —I am not prepared to give the details of that; that would be a special case, and I think you will get that information from a witness who will follow me, and he will be able to give the Committee more particulars as to the real working of these clubs. I only know that such clubs do exist, and I know something as to the general management of them.

11689. You cannot state whether there is so much per man employed paid by the masters?— No, I cannot. I cannot give the details of the proportionate payments.

11690. Are there any truck shops in your district?—No, I believe not.

11691. What is the system pursued in your collieries in regard to providing the means of education, and in regard to the support of schools? —There is plenty of opportunity and means of education in our district.

11692. Has every colliery one or more schools attached to it?—Not of its own, but there are schools in the district.

11693. You have no colliery schools, strictly so called?—Not in our particular collieries.

11694. What is the nature of the schools which the children of the workmen attend; are they national schools or British schools, or schools under Government inspection; perhaps you could state likewise the proportion of children in attendance?—I could put in a document as to the boys employed at one particular colliery, showing their number, their different ages, and those that can read and write, and those that can read only.

11695. Mr. *Fawcett.*] What is this colliery to which you refer?—The Stafford Colliery, near Barnsley.

11696. Mr. *Liddell.*] Are those boys in attendance

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tendance at any particular school, or at several schools?—There are two or three schools; there are two schools at Dodworth, and they go to those schools, I believe; but neither of them to the colliery proprietor, because there are schools in the district, and it is not necessary to have further means of education.

11697. Do you know whether they are Church of England schools?—I know that one is.

11698. And the other is a British school, I suppose?—Yes; there are 33 boys employed at that colliery.

11699. Mr. *Fawcett.*] How many men are employed at the colliery?—I think that at this colliery there are 225 men, or something of that sort.

11700. Mr. *Liddell.*] That seems a very small proportion of the boys to the men?—Yes. There are nine under 12 years of age, and they can all read and write; and there are seven above 12 years of age who can neither read nor write.

11701. Up to what age do those seven reach?—Up to 14; they are between 12 and 14 years of age.

11702. Are those seven in attendance at school now?—At Sunday schools, but not day schools. There are 20 that can both read and write, six that can read only, and seven that can neither read nor write. Under 12 years of age there are nine, and they can all both read and write.

11703. They would not be employed, under the Act of Parliament, if they could not, would they, or at any rate they would be compelled in that case to attend school?—Yes; so many hours a week.

11704. So that the Act is strictly complied with in regard to the employment of boys under the age of 12?—Yes.

11705. I gather from the summary which you have given, that out of the 33 boys seven can neither read nor write?—Yes.

11706. And they are from 12 to 14 years of age?—Yes.

11707. That would appear as if the parents of these boys had not tried to obtain employment for them at the interdicted age, but had waited until they had passed that age, and then obtained employment for them?—Yes; that does look so.

11708. What would be the effect if boys were not permitted by law to enter your collieries till they were 12 years of age?—In our particular district it would be, to a certain extent, an inconvenience, but not so much as in many other districts.

11709. Does that arise from the fact that your seams are thick seams?—Yes.

11710. What is the average thickness, or, rather, what is the minimum thickness of any seam that you work?—There are a few collieries worked as low as 20 inches and 2 feet, but the thick collieries are in some places 8 feet, and up to 9 even.

11711. But you are not working any of those thin seams, are you, in any of the collieries with which you are connected?—No, not to any extent.

11712. And therefore it is, you say, that the inconvenience at attending the non-employment of the smaller boys would be less in your case, than in some districts where they are absolutely required?—Yes.

11713. Supposing that the working time was limited to eight hours a day for boys under 14 years of age, would that be inconvenient?—It would cause great inconvenience.

11714. Could you make such arrangements in the working of the pit, as to enable the system of shifts of boys to be adopted?—It would be very inconvenient, and I think very dangerous too.

11715. Have you seen the evidence given upon that point by other witnesses?—I think not; I have read Mr. Dickinson's evidence, and I think he did allude to the subject.

11716. Have you seen the evidence of other masters and managers?—No.

11717. Perhaps then you will state shortly to the Committee what in your opinion would be the inconveniencies attending the employment of double shifts of boys between the ages of 12 and 14?—It would, I think, increase the cost, and in some places it is difficult enough already to get one shift of boys. And it would be very dangerous indeed I think to allow boys to be running about the main roads, while the colliery was working; I think that the danger and the increased cost, and the difficulty in getting the second shift would be very great.

11718. Is there a scarcity of boys' labour in your district at present?—In some cases I have heard of it; at our own collieries we can get boys.

11719. Are there many manufactories in the neighbourhood where they can find employment?—There are Barnsley and Sheffield in the neighbourhood; there is plenty of other employment for the boys.

11720. At those places which you have mentioned, there is an unlimited sphere of employment for children of that age, I presume?—Yes.

11721. Is there much competition between you and those other employers of labour for the labour of these boys?—Colliers, as a rule, I think, like their children to go into the mine.

11722. They prefer that to other trades?—Yes, I think they do.

11723. Mr. *Fawcett.*] Is this colliery near Barnsley, concerning which you have given us educational statistics, one under your own management?—Yes.

11724. Then you probably know something about these boys personally, or you have heard something of them?—I see them often in the pit.

11725. Can you state, positively, with regard to those seven boys between the ages of 12 and 14, who can neither read nor write, that, to your own knowledge, not one of them went in the mine under the age of 12?—No, I cannot.

11726. Then that looks as if the Act had been evaded?—I know this, that we should not take a boy under 12 unless he could either read and write, or would comply with the Act.

11727. But, in all collieries, they are not as careful as you are, perhaps?—I believe that is pretty well attended to in other collieries in the district.

11728. You have never thought of tracing the history of these boys before the age of 12?—No.

11729. But you can state positively that not one of these boys was employed in your collieries before the age of 12?—Yes.

11730. Has not the movement now become very general in favour of the men not working more than eight hours?—They only work eight hours in our district.

11731. Do not the boys work after the men have

have ceased?—Yes; the boys are required to work an hour or two hours after the men.

11732. So that the boys work on an average from nine to ten hours a day?—Yes.

11733. Mr. *Liddell.*] What are these boys chiefly employed in?—In driving ponies, trapping behind doors, and coupling tubs on self-acting planes. They are very happy, as a rule, singing and whistling all day long.

11734. Mr. *Fawcett.*] Then the work in which a boy is employed, is not skilled work?—No.

11735. Therefore, there is no ground in the argument, that a boy ought to be introduced into a mine before he is 12, in order to learn his work if it is simply driving a pony or trapping a door?—It accustoms him to the work of the mine.

11736. But it is not the case that any particular kind of skill is required which boys might not easily get after they were 12 years old?—No; the thing is that they have certain sets to go through. A boy when first he goes into a pit is a trapper, and then a horse driver; then from that he passes to a hurrier, and from that to a collier.

11737. The point I was directing you to was, that the boy's work was not a very skilled kind of work which it required an apprenticeship to learn?—No.

11738. One of your grounds for objecting to any limitation of the hours of boys between the ages of 12 and 14 by the system of working in different shifts, is the danger?—Yes.

11739. Could not that be obviated?—If you stopped the colliery for an hour, perhaps you might get over it.

11740. I think you said that the majority of the colliers in your district were drunken and improvident?—Drinking men, spending their money in drink.

11741. Is the average of drunkenness and improvidence amongst them greater than amongst other classes of workmen?—I have always understood that the colliers drink as much beer as any other class; I have not got the statistics with me.

11742. Do not you think, if they were better educated, they would become less drunken and more provident?—Yes, no doubt they would.

11743. And if they were less drunken and more provident they would be much better workmen, I presume?—Yes.

11744. And ultimately, by their improved education, the employers would be benefited?—No doubt.

11745. And therefore in that way they would ultimately receive a very important compensation for any inconvenience to which they might be by any restrictions on the labour of boys?—I do not think they would get more coals, but the men would be better conducted and would themselves benefit if they were better educated.

11746. But if they were better conducted it would, generally speaking, benefit the employers also, and your occupation would be a more agreeable one, would it not?—Yes. Every employer does his best, I believe, to see that the children are properly educated; in fact, I know collieries where they pay as much as 150*l.* a year towards schools.

11747. Any restrictions imposed upon the employment of children, you would wish extended to all the trades in your district, I presume?—I think it would be only fair.

11748. And if they were so extended your objection would be removed, I suppose?—I think it would end in this, that no boys would be employed at all till they were 14, which, I think, would be a bad thing for the colliers and widows and the boys themselves, because they would always have the details to go through before they were fit to work coal.

11749. Mr. *Greenall.*] Who pays the wages of these boys?—Generally the master.

11750. What do they earn on an average?—A boy of 12 years of age would average about 1*s.* 6*d.*; they are paid as low as 10*d.*, and up to 2*s.* a day.

11751. General *Dunne.*] As to the boys, what is the proportion of the boys to the men, or is there any fixed proportion?—It varies at every colliery.

11752. Is there any rule by which you are guided as to the number of boys that are required for the men?—There is no rule.

11753. Are they ever hired by the men in your colliery?—In some cases they are; but very seldom, I think, under the age of 14.

11754. What is the average number of boys per hewer?—At Lundhill there are 30 boys and about 260 or 270 men.

11755. At the Stafford colliery is there a smaller proportion of boys than is general in other collieries?—It is 33 boys to 225 men, and at Lundhill it is 30 to 260 or 270.

11756. Do you think that any boy taken suddenly from an agricultural district and put down into a mine would answer as well as a boy who had been brought up in the district, though not employed in the mine at first?—No, I do not think he would.

11757. Therefore, it requires a certain intelligence to know the duties; a peculiar intelligence on the part of the workman?—Yes, I think it is a sort of usage which the boys get that gives them that.

11758. And do not you think that a certain amount of education, which produced intelligence, would be an advantage?—If a boy can read and write, I think that is all that is necessary, as a rule.

11759. For the drawers, is any peculiar intelligence required?—No.

11760. Mr. *Liddell.*] Have you any women employed about the pit banks of the collieries under your management?—No.

11761. In regard to sub-inspectors, a subject on which we have had a great deal of evidence, are you favourable to the appointment of sub-inspectors to assist the existing inspectors in the discharge of their duties?—No, I am not.

11762. Will you state any objections that you feel to a class of sub-inspectors, such as I have described, being appointed?—I think that it would cause disputes and arguments between the under-viewer, in many cases, and the sub-inspectors, which would lead, I think, to insubordination and want of discipline on the part of the deputies under the under-viewer, and on the part of the men, and, consequently, to accidents and loss of life.

11763. That is contemplating an inferior class of men to the present inspectors being appointed?—Yes.

11764. And you would apprehend differences of opinion, because the very fact of their being an inferior class of men would bring them into collision with the viewers, who would not have for them

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them that deference which they have for the very superior class of men who now fill the office of inspectors; am I right in supposing that that is your meaning?—Yes.

11765. All the officers and subordinates in connection with the colliery are now appointed upon the responsibility of the master; is not that so?—Yes, we are responsible.

11766. And you are unwilling to part with that responsibility?—If the Government will take the responsibility of the working and of the accidents of collieries upon their own shoulders, then they can have the appointment of sub-inspectors; but I take it for granted that they would not do that.

11767. That would be tantamount to leaving the management of the colliery in the hands of the Secretary of State, would it not?—I think it would; if they have power to interfere in any way, they must take the whole responsibility.

11768. But I take it that you are not at all prepared to part with the responsibility, or that you do not wish to see any change in that respect, with a view to the safety and good management of the workmen in your mine?—Exactly so.

11769. Mr. *Greenall.*] You have no objection to the system of inspection?—As it stands at present, I have none.

11770. Your objection would be to an inferior and not so well informed set of persons being appointed as sub-inspectors?—Yes, I think they would interfere too much with the management, and I think it would be a bad thing for the men, and would lead to all sorts of disputes between the under-viewer and the sub-inspector.

11771. You do not object to the present inspectors visiting your collieries as frequently as they like?—Not in the least; we always tell the under-viewer to give every information if the inspector should come when we are not aware of his coming. I wish to point out another result which would follow, if you appointed sub-inspectors, who would be interfering too much with the management of collieries. Of course I take it that the inspector would be responsible for all the acts of the sub-inspectors; if they made suggestions, which were carried out in collieries, and accidents happened, the inspector would not be free for action when he went to a coroner's inquest, and he could not find fault, as now; I mean that I think it is the duty of an inspector to be perfectly free when he goes into an enquiry before a coroner's inquest, but if he took any part in the management of a colliery, or interfered with it, I think he could not find fault in the same way that he can now.

11772. Mr. *Woods.*] I suppose that in the answers which you recently gave, as to the responsibility of the management of mines, you considered the point that the persons who are responsible for the management, enjoy the profit of the working, and you would say that the two things should be coupled together?—Yes, power must go with responsibility.

11773. And directing your attention to the question of expense of management, do you think that the expense of the management and profit of the working of mines, and the responsibility should all be considered together?—Yes; I think too that inspectors should be men of ability, whose advice and suggestions you would take notice of.

11774. Mr. *Liddell.*] Do you consider that the work of inspection can be adequately performed by the present staff of inspectors, particularly in relation to your own districts?—I think that if anything is wrong at any colliery, the inspector is sure to hear of it.

11775. And if nothing is wrong there is no occasion for inspection?—No.

11776. But I do not understand you to express any opinion adverse to the amount of superintendence at present exercised by the inspectors?—No; I have no objection at all to the present mode of inspection.

11777. Are you prepared to go beyond that, and to say that the improved system of colliery management may in part be due to the amount of superintendence by skilful engineers which now exists?—Yes, I think so.

11778. Have you any observations to make in regard to coroners' inquests, and the constitution of juries?—I understood it was proposed to have the jurors composed to the extent of half their number of working miners.

11779. That is a suggestion that has been made to the Committee; what is your opinion upon that point?—I think that generally speaking now, as the matter stands, justice is secured to the collier. Most juries are formed of shopkeepers, and in many cases (in some cases at least) of men who have been colliers; I think that if there was any prejudice at all it would be in favour of the men, because these shopkeepers are supported by the men, the men buy their goods from them, and so forth, whereas the masters have very little to do with them; I think that as a rule very likely if half the jury were composed of working men they would be a partial jury.

11780. Are there not points that may arise, in the investigations before the coroners' inquests, in which the practical knowledge of one or two jurymen may be valuable for the elucidation of facts and getting at the truth?—The inspector of the district is generally, or ought to be, at the inquest, and he can explain any matter of detail to the jury.

11781. And has he an unlimited power of cross-examinatian of any witness that may present himself?—Yes, I believe he has.

11782. Which he exercises to the full, does he not?—Yes. At present the miners of the district may form the jury; any householder may be appointed on the jury, and, of course, colliers in that district are frequently householders. I believe they frequently object to it and complain of its wasting their time, and so forth.

11783. Any witness may proffer his evidence before a coroner's jury, may he not?—Yes, I believe so.

11784. In regard to accidents, is it your opinion that the accidents in mines, in your districts, are mainly caused by a want of skill in the agents, overmen, and chief managers, and from a lack of diligence or want of care on the part of the subordinate officers?—I consider that some part of the more serious accidents, such as explosions and so forth, have arisen from want of moral courage on the part of the manager to insist upon certain precautions being taken; but the greater part of the accidents, the small accidents, which come up to the greatest number in the aggregate, are caused by the neglect of the men themselves, such as accidents from falls of roofs.

11785. You have used the phrase "want of moral courage on the part of the manager," which

which you say has led, in some instances, to very fatal results, in the shape of very serious explosions; will you explain a little further what you mean by that?—I mean this: in cases where a colliery owner employs a manager solely to take charge of a certain pit, in some instances, that manager has not insisted upon his master doing certain things which he ought to have insisted upon.

11786. You mean that he has rather kept back his knowledge from his master, or forborne from expressing his own opinion as to the necessity for improvement?—Yes, I think so.

11787. I need hardly ask you whether that is a matter to be deplored?—It is.

11788. Is it not your opinion, that if a point were strongly pressed, by a competent officer, upon the owner of a colliery, that owner would incline to take the advice so offered in nine cases out of ten?—As a rule he would, but in some cases the manager does not press it upon him sufficiently.

11789. Then you are distinctly of opinion, and you candidly avow, that in some cases you consider that the blame of these serious occurrences is attributable to a want of activity on the part of the owners and managers of collieries?—I think it is really on account of the manager not insisting upon certain things being done, or certain precautions being taken.

11790. Rather than on account of any indisposition on the part of the owner to take his advice, and to follow his suggestions?—Yes, and perhaps, also, from the manager's wishing to prevent any disputes with the owner.

11791. Wishing, perhaps, to avoid any large additional outlay?—Yes, to avoid that, or disputes with his master; I consider that every colliery owner ought to place his colliery under the charge of some responsible person who is independent enough to insist upon certain things being done. The cases which I have been referring to are very exceptional cases; in the aggregrate, there is no doubt that the greater number of accidents are caused, as I think, by neglect of orders and want of precautions on the part of the men themselves.

11792. The collieries in your district are of a very fiery nature, are they not?—Yes, they are.

11793. And the necessity for increased caution is very much felt?—It is.

11794. That is, a point, I presume, which the inspectors must always bear in mind?—Yes.

11795. And the necessity for constant inspection is very much felt in that district, owing to that circumstance?—Yes.

11796. Have the inspectors been in the habit of making suggestions, from time to time for the improved ventilation of those dangerous pits?—Yes, occasionally, when it has been necessary.

11797. And those suggestions, for the most part, are followed, I presume?—Yes, I believe so.

11798. Do you think it would be desirable that all agents, over-men, or chief managers of mines, should be subjected to a scientific examination, and hold certificates of competency?—I think it appears right in theory, but I think that, in practice, there are many more who would pass an examination very well that would not be nearly so well fitted as others to take the practical charge of certain duties at the collieries. It all depends who are to be the examiners and what is to be the examination.

11799. I was going to ask you a question on that point; do you see your way to the appointment of a competent Board of Examiners?—I think this, that if Government sent down a staff of examiners, and they pass a man, it is a sort of guarantee, and it takes the responsibility of that man's efficiency off the owner of the mine. Now we appoint all the men, and we are responsible for seeing that they are proper men.

11800. As a colliery owner and manager, should you wish to see such a system adopted as that Government should appoint Boards of examiners, and, to that extent, take off your shoulders a certain amount of responsibility in the appointment of your sub-officers?—It would, in every case, be subject to an approval; we must appoint our own men.

11801. But would not the fact of a man having been passed by the Government Board of Examiners, render it in some cases difficult for you to reject his claim for employment?—Yes, it would; we must be left open to employ whom we like whether they are passed or not; in case they are passed we must be left open to choose them.

11802. But under that system your hands would not be quite so free as they are at present in the choice, and selection of your officers, would they?—No, I do not think they would.

11803. And in that sense you prefer the present system to any system, such as that I have described?—Yes, I would rather appoint our own men, free and independent of anyone else.

11804. Mr. *Fawcett.*] In the case of fatal accidents in mines, is it now common for the relatives of those who are killed, to bring an action against the proprietors for compensation?—I do not know that it is common, but there have been instances of it.

11805. Do you know of your own knowledge what amount has ever been recovered by the widow, or the children, whose husband, or father has been killed?—After the explosion at Edmund's Main Colliery the widows recovered 1,500 *l.*

11806. How many widows were there in that case?—I am not quite sure.

11807. Do you think it is as much as 100 *l.* each for them?—I think about that, but I am not sure.

11808. If that practice became common, that would give, I presume, in your opinion, a greater security for the ventilation of mines?—Yes.

11809. You have said, have you not, that many explosions occur, because the managers do not like to represent, or do not represent to their employers what ought to be done?—Not many; but I think some occur from want of moral courage in insisting upon certain precautions being taken.

11810. If that is the case, would it not be possible for the inspector to discover, if he inspected the mine, that which the manager knows ought to be done, and then to insist upon its being done?—I do not think it would, unless he examined the colliery most thoroughly in every respect.

11811. But it would be possible if he did examine it thoroughly?—It might appear so to him.

11812. Then looking at it in that view, more inspection would prevent accidents, would it not?—Yes; it all depends, of course, upon the sort of inspection.

11813. If there were good inspection, that would be the result?—Yes.

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11814. Do not you think, therefore, that if you could secure good inspection, more inspection would be desirable?—I think that as a rule (of course, there are exceptions to every rule, and that is one exception which I have just named) in our district the inspection is as much as is required. I think that an inspector has a large district, but every collier that is employed in a colliery has the option of complaining either to him or to the under-viewer of anything that he finds deficient.

11815. Although generally you are satisfied with the amount of inspection, yet you make the exception that, if you could secure good inspection, it might sometimes prevent serious accidents?—In some cases.

11816. Mr. *Greenall.*] I think I rightly understand you to be of opinion that it is of very great importance indeed that a good manager should be chosen by the master of the colliery?—I think so.

11817. And the next thing is, that the master having confidence in that manager, what he recommends should be carried out?—Yes.

11818. And that being done, some accidents would be prevented?—Some accidents would be prevented, I think.

11819. General *Dunne.*] I find, from a Return given in, that the deaths from falls of roof and coal are about two-fifths of the entire accidents in mines. Do you find that they are the most frequent accidents in your mines?—Yes.

11820. And that fire-damp is not so frequent a cause?—No.

11821. And yet you are in a very inflammable district?—Yes.

11822. Do you think that the precautions against fire-damp are taken strictly in your mines?—Yes.

11823. Are not those accidents which happen from falls of roof and of coal much more likely to occur from carelessness than the others?—Yes; no doubt.

11824. And they do occur, in fact, from carelessness?—Yes.

11825. Is that from carelessness on the part of the miners, or from the want of supplying props, or whatever is necessary to the men?—From the carelessness of the miners.

11826. Could they not obtain props and all that is necessary to prevent those falls?—There are always plenty of props, or there ought to be. There is a rule which requires every colliery-owner to have sufficient material always at hand.

11827. That is one of the points of discipline, perhaps, that you refer to as being overlooked from good nature by the managers?—No; I do not blame the managers for that; that is the neglect of the men themselves in setting the props.

11828. But any manager can enforce the placing of those props, can he not?—Yes, he can enforce it, and he leaves instructions with the men in many cases where they are to be placed.

11829. And they neglect those instructions?—They neglect them sometimes.

11830. Therefore the most fruitful source of accidents is one which is attributable, you think, to the men themselves?—Yes.

11831. The shaft accidents also are attributable to the men, I suppose?—As a rule.

11832. Are they numerous?—There are very few of them.

11833. Something less than a fifth is given in this return. Should you say that that is the proportion?—That is rather more than I should have said.

11834. "Miscellaneous accidents" are those that would occur in all ways, I suppose?—Yes.

11835. Those from fire-damp you would attribute more to the non-attention of the masters or the managers?—I attribute them, in some cases, to the fact of proper precautions not being insisted upon by the manager. In our district we have three collieries under our management where all the lamps are locked safety lamps, not a naked one being used in the pit.

11836. Is there any other test of due care being taken in that respect?—I consider that the safety lamp is the best test.

11837. Mr. *Woods.*] I did not fully understand what you meant by "moral courage" being wanted; will you explain that?—I will illustrate what I mean. Supposing that a colliery was subject to fire-damp, and was partly worked by naked lights and partly worked by safety lamps, I think that there should be great discipline carried out in such an instance as that. Or if an extra furnace was required, owing to the ventilation being in any way deficient, it should be insisted upon that another furnace should be put down at once, and the same with reference to any engineering matter of that sort.

11838. But that appears to me to be best described by the word "neglect," and not as want of moral courage?—I mean that it is want of moral courage to insist upon those things being done which sometimes cause the accidents. I think that the owner ought to place his colliery (a large colliery I mean now of a dangerous nature) under the charge of some responsible independent man, who will not be afraid to make suggestions to him, and to insist upon those suggestions and precautions being carried out.

11839. Then I am to understand, I suppose, that you mean to bring a charge against those owners of collieries who do not hand over their collieries to the management of the viewer?—I do not quite say that; but I say that every colliery owner should employ a thoroughly practical and experienced man as viewer, and I think, with regard to every large and dangerous colliery, that it should be handed over to the care of the viewer.

11840. How many people do you employ in your collieries?—I should think 1,200 or 1,500 altogether.

11841. How many collieries have you?—We have the real charge of five; but then we are connected in several ways with many others.

11842. Do I rightly understand you to be one of the owners?—No, I am a mining engineer.

11843. You are aware, of course, that in whatever degree a colliery might be handed over to the mining engineer, that would not hand the legal responsibility over exclusively to him?—No.

11844. That responsibility would still sit upon the shoulders of the owner of the colliery?—Yes, except that a mining engineer has a character to keep up in his district, and a position to maintain.

11845. Do you agree with former witnesses that in case of a bad explosion occurring at a colliery, that colliery would be at a disadvantage in the kind of men it would have working in it, and in the rate of wages it would have to pay after the explosion?—There is no doubt that it is the great interest of the owner to prevent explosions as much as possible.

11846. Then

11846. Then the owner has a position to keep up as well as the mining engineer?—No doubt; I only alluded just now to some exceptional cases.

11847. I dare say the Committee will agree with you (at least I shall), that there are some bad managers, and some badly appointed and some negligently appointed, but I only wished you to qualify what seemed to me to be a general charge against the owners of mines?—I did not mean it as a general charge in any way, but only as an exception.

11848. You appear to me to give some degree of confidence to a Government Board of examiners; is that so?—No; I think I said that I would rather appoint our own underviewer and deputies.

11849. Is it, in your opinion, desirable that there should be a Government Board for the purpose of giving certificates of competency to the officers of mines?—No, I do not think it is desirable.

11850. Reverting to the "moral courage" question, and the accidents which happen through want of moral courage, supposing that one of the lamps in your colliery were to wear out (you have given in evidence that they are locked safety lamps), would that cause an explosion?—Yes, it might.

11851. Supposing that one were knocked against a waggon and broken to pieces, would that cause an explosion?—Yes, if the mine were highly charged with fire-damp; but I must explain, that such a thing would be found out immediately, and no safety-lamp that was worn out would be allowed to go out of the lamp office; the lamps are examined every day.

11852. Supposing that the fire-damp was very strong in a distant part of the working, would it be possible for a lamp to be destroyed which was a good lamp early in the morning by its suddenly flaming up in the presence of the gas?—No; we use entirely Stephenson's lamp; and supposing that fire-damp is found to any extent, the lamp goes out.

11853. But you do admit that the destruction of a lamp by accidental causes in a part of a mine highly charged with gas, would probably cause an explosion?—No doubt.

11854. Then there may be a good many explosions from other causes than the want of moral courage on the part of the manager?—No doubt.

11855. Shaft accidents in mines, I understood you to say, happened from defects on the part of the managers?—No; I think I hardly said that, because it depends upon what sort of a shaft accident it is. A man may fall down a shaft; that is his own look-out.

11856. In such a complicated machinery as that which exists in a pumping and winding shaft, I suppose a wooden slide might come out of the wall and spear the cage as it was coming up, and kill everybody in the cage?—Yes.

11857. And that might be a circumstance which you would more correctly describe as being an accident, rather than as negligence in the working underground?—Yes.

11858. You recognise the fact in your evidence, that mining operations must of necessity be exposed to more accidents than employments above ground?—Yes.

11859. *Chairman.*] I understand you to be one of a firm who undertake the management of mines?—Yes.

11860. Have you any limit as to the number of mines that you would undertake?—No.

11861. You now have five under your management?—Yes.

11862. Do you reside at Sheffield?—Yes.

11863. What is the greatest distance of any mine of which you have the management from there?—I should state that my partner, Mr. Brown, lives at Barnsley, and I live at Sheffield.

11864. And you divide the management of the mines between you?—Yes; but the Committee should understand that we only have the superintendence of the mines; we always have a man resident on the spot as an underviewer.

11865. You do not call him manager; you only call him underviewer?—Yes, and we are responsible.

11866. Of what quality is the man whom you appoint on the spot?—He is a man whom we know, in some way or other, before we appoint him.

11867. And your chief resident officer on each mine you call an underviewer?—Yes.

11868. What salary do you give him?—He gets 150*l.* a year.

11869. What description of man is he; has he been a working miner?—Very often he rises from that.

11870. Do you consider it part of your duty, as general superintendent, to visit the mines frequently?—Yes.

11871. And to go down and go over them?—Yes. Besides that we have weekly returns of the ventilation, and so forth.

11872. Returns of the amount of air that is circulated in the mine, you mean?—Yes.

11873. What is your notion of the duties of inspectors?—I think that the inspector ought, in case of accident, to visit the place and find out all the information he can, and try to get at the origin of the accident.

11874. Do you think he should only visit the place in case of accident?—I think that as a rule he should only visit it then; but he has power of course to visit the mine at any time he likes.

11875. Is not that reducing his function rather to a judicial character, if that is all that he has to do?—Yes, it is to a certain extent. If an inspector hears, before an accident, of any deficiency, in any way, I think it is his duty to go and see that, and to report it, and to insist upon its being altered; but I think that an inspector should not take too much upon himself, or make too many suggestions, because I think that if he does, and if those suggestions are carried out, and if after that an accident happens, he is not so free to act before a coroner's jury as if he had had nothing to do with the arrangement of the pit.

11876. Do you think that an inspector, by going down into a mine and looking to the main air-ways, and the general system of ventilation, and perhaps going to one or two working-places, might satisfy himself as to the general management of that mine without visiting every part of it?—I think he could; he might have a general idea how things were carried on.

11877. You think he might do good by such visits?—Yes, I think he might.

11878. If the mine he happened to visit were an ill-regulated mine he might find that out, and do good in that way?—Yes.

11879. Representing the fact to the manager or owner?—Yes.

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11880. Is it the practice of the inspector now to make representations to the manager or to the owner?—I think that where a mining engineer was appointed the inspector would make the representation to him, but where an underviewer alone was appointed, and the master himself attended to the colliery, I think he would make it to the owner.

11881. Do you think it would be a good thing, that in every instance he should be required to represent it to the owner?—Yes.

11882. Do you think that as a rule the owners are anxious to remedy any defect which they know to exist in their mines?—Yes.

11883. But the manager keeps back, as I understand you, the knowledge of those defects from the owner?—I do not say that that is the rule, but it has happened that a manager has not insisted upon certain things being done when he ought to have done so.

11884. And to meet that you think it would be a good thing that the inspector should report to the owner?—Yes.

11885. Have you ever considered the question of having certificated managers, in the same way that you have certificated captains in the merchant service?—I think that if you were the owner it would interfere with your appointment, to a certain extent, and I think that it would also act in another way, to a certain extent; it would take some responsibility off your own shoulders in the appointment of those men.

11886. Of course the requisition of a certificate in the merchant service limits the selection which the ship-owner has, does it not?—Yes.

11887. Can you give any reason why the right of selection should not be limited in the case of mine-owners, in the same way as it is limited in the case of ship-owners?—I think it is difficult to form an opinion on the subject, till one knows what class of examination the managers would have to undergo, because many men might pass an examination, who would not make good practical managers, and some who are practical men and know well the duties in the different parts of a colliery would not be able to pass the examination, and that might exclude them. I cannot form an opinion until I have an idea of the examination, and I think that we want most the men who are thoroughly good practical men in their business.

11888. I understand you to say that you object to an examination, because you think it would be difficult to frame such an examination as might not exclude very useful men from mines?—I do.

11889. You do not say that it would be impossible?—No, because I do not know what the examination might be.

11890. Another part of the system in the merchant service, is that a certificate however obtained is liable to be suspended or withdrawn, in cases of negligence or misconduct?—Yes.

11891. Do you see any objection to such a rule as that being adopted, in the case of mines also?—That is left now in the hands of the mine owner.

11892. As it used to be in the hands of a ship-owner, but it was found that the ship-owner did not exercise sufficient care in the selection or dismissal of his captain?—The manager is at present subject to dismissal.

11893. I want to know if you can point out any difference between a mine owner and a ship-owner; it has been found, I believe, that the introduction of the certificate system in the case of ships' captains, and especially the liability to the suspension or withdrawal of that certificate, has improved the character of the captains of ships; can you give any reason why it should not also improve the character of the managers of mines?—No, I cannot give any reason why it should not.

11894. You spoke of one of the suggestions which a manager might be rather reluctant to make, on account of its being a very expensive suggestion; did you allude to the extra furnace?—Yes, I only gave that as an example.

11895. Has the Act of 1862 been effectually complied with in your district as far as you know?—Yes.

11896. You did not merely mean a second furnace, but you meant a furnace beyond that which is strictly required?—Yes.

11897. Is there not sometimes an evasion of the law, by making the same upcast shaft work for what are virtually two collieries?—In our district they have all two pits.

11898. But is not sometimes one upcast shaft made to do double duty; perhaps you have not known such cases?—No, I have not; I know instances where there are two downcast shafts and only one upcast shaft, but I do not think that that evades the Act at all. It is necessary that there should be two shafts to every colliery, one upcast and one downcast, but nothing is required beyond that.

11899. You do not read the Act to mean one upcast shaft for every downcast?—No, certainly not.

11900. Speaking of lamps, have you seen the Belgian lamp?—I have not seen it; I have heard of it.

11901. Have you heard a good account of it?—Yes; I have never practically used that lamp.

11902. Has your attention been directed to Mr. Ansell's means of communication in mines, and ascertaining the presence of inflammable gas?—That I have heard of, and I have heard a good account of it.

11903. Mr. *Woods*.] I think you said just now that you did not see any reason why the owners of collieries should not be subject to the same regulations as ship-owners; are you aware that a skipper when at sea with a ship, and with passengers, is entirely removed during his voyage from all control by the owner?—I do not know I am sure what the regulations are in that case.

11904. But can the owner have any control over him when he is at the other side of the globe, or in the middle of the ocean?—No.

11905. Whereas I apprehend that the owner or the managing partner of a mine, as the case may be, does exercise or ought to exercise a degree of control over the management of the mine from day to day?—Yes.

11906. That might perhaps tend to modify your opinion as to examination of managers by competent authorities?—Yes.

11907. Have you ever considered what kind of examination it might be that would be advantageous, and who the examiner should be?—I suppose it would be done by the inspectors; I took it for granted that it would.

11908. Do you think that it would be desirable to set the inspectors of mines over the managers of mines?—I should not recommend it myself, and

and I never intended to recommend it in my evidence.

11909. General *Dunne.*] I understood you to say that a man who was examined might be competent, but you would not approve of limiting the power of the owners of mines to appoint the persons they thought fit?—No.

11910. Mr. *Woods.*] In reference to the practice of having two down-casts and one up-cast, I suppose it is a very common thing to have one down-cast with one up-cast for several different mines?—No, I do not think so; perhaps I do not quite understand the question.

11911. In the case of two shafts being sunk through a coalfield having many seams one under the other, is it a reasonable mode of ventilation that several seams, one under the other, should be ventilated by the same up-cast and the same down-cast shaft?—It is not a common thing.

11912. Is it a reasonable thing that it should be so?—No, I think not.

11913. You are not aware, perhaps, that it is the practice?—I know that it is done, but it all depends of course upon the extent of the workings. In our district there are never more than three seams, I think, worked from the same shaft.

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11914. Are you aware that in many collieries there are what are called split air courses?—Yes.

11915. Which consist of three or four different currents in the mine, there being only one current down the down-cast, and one current up the up-cast?—Yes.

11916. Do you object to that?—No.

11917. In what respect, if there are two currents in the same mine, does that differ from two different collieries having separate down-casts, but one up-cast, inasmuch as those two different currents coming from two directions, go up the same up-cast shaft?—You might take the whole of the air round the colliery, but it is much better to divide the air when you get it to the bottom.

11918. Two collieries adjoining one another frequently have one upcast shaft between them, have they not?—I do not know two collieries that have one up-cast between them.

11919. You are not aware that that practice obtains?—No.

JOHN CHAMBERS, Esq., called in; and Examined.

11920. Mr. *Liddell.*] YOU are, I believe, managing partner in the firm of Newton, Chambers & Company, at the Thorncliffe Works?—Yes.

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11921. They are coal and iron works, and are situated in the neighbourhood of Sheffield, are they not?—Yes.

11922. Are the coal and the iron worked in the same mine?—In the same locality. We have coal works and ironstone getting and blast furnaces.

11923. Is the ironstone worked in connection with the coal in any pit?—Not in the same pits.

11924. You are a member of the Executive Committee of the Mining Association of Great Britain, I think?—Yes.

11925. Have you been engaged for a considerable number of years in the coal trade?—Yes, over 40 years.

11926. And you employ a very large number of people; 2,000 people, I believe?—About that.

11927. Have you weighing machines on the pit banks in all your collieries?—Yes, in all our collieries.

11928. Have you had many occasions of dispute in regard to the accuracy of the machine or the mode in which the coals are weighed, or any matters of that kind?—No. We prefer weighing to measuring, because when we measured we had a loss of about 10,000 tons per year, and since we instituted weighing the loss has been reduced to from 2,000 to 3,000 tons upon what we pay the colliers.

11929. Then it is for the interest of the owner as well as of the workmen to have the coals weighed?—No doubt; but there is an evil with that even, namely, that the colliers send out all the dirt that is in the mine, unless you are very vigilant. We weigh the material, the colliers are paid for the gross weight, and if there is any dirt in the mine we are obliged to pay for that, and pick it out afterwards.

11930. Then even under the system of weighing it requires great vigilance on the part of your weigher to see that the coal is brought up in a marketable state?—Quite so. I made some observations this month before coming up here, and I found that the colliers were sending out 56 lbs. of dirt to one ton of coal. The check-weighman then gave notice to the miners of what was going on at the pit bank, and they reduced that amount to 28 lbs. of their own voluntary act. That 28 lbs. per ton would cost my firm something like 1,250*l.* a year upon the quantity of coal drawn.

11931. You say that the check-weighman (that is to say, the man acting on behalf of the workmen) gave the men notice of what was going on?—Yes.

11932. Does that form part of the check-weighman's duty?—Certainly not; I was going on for a week to ascertain the real facts of the case; and while on the first day I had 56 lbs., on the second day I had only 28 lbs. of dirt to the ton. That 56 lbs. would just double the loss to which we were subjected.

11933. In consequence of that notice of the check-weighman given in the interests of the workmen, to warn them what they were doing, they reduced that amount to 28 lbs.?—Yes.

11934. Are you going to take any steps further to reduce that quantity of dirt?—Yes; I intend to ask the colliers to give me the amount of the dirt. If there were no check upon them, they would send up all the dirt in the mine, and then we should have to clean the coal afterwards, so that it might be sold in a marketable condition.

11935. I presume it is very difficult in all cases to separate the whole of the dirt?—No doubt.

11936. Is there any fixed quantity of dirt allowed, as it were?—No; we have never had any allowance whatever. We merely require the collier to send 21 cwts. to the ton; we sell 21 cwts. to the ton of coal, and the whole of the dirt that we take out in order to make it marketable, we lose.

11937. If the coal were delivered in a dirty condition, you would very soon hear complaints from the consumers, I suppose?—No doubt about it; they would make serious complaints.

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11938. Are your weighing machines tested?—Continually.

11939. And have you had any complaints from the workmen of their being inaccurate at any time?—We have had occasional complaints, which have had immediate attention; we request the check weighman to see the weighing machines put right.

11940. Mr. *Greenall.*] Would you object to your weighing machines being inspected periodically by the inspectors of weights and measures?—Certainly not; our object is to have them correct, that the men may be fairly dealt with.

11941. You find, it appears to me, from your evidence, that it is much more profitable to pay for the getting of your coals by weight than by measure?—No doubt of it.

11942. Mr. *Foster.*] Are the arrangements between the colliers and their masters, generally, on the weighing system in your district?—Yes.

11943. Is that the custom of the district?—That is the custom of the district; it has become so since 1860.

11944. Where it is not the custom in other districts, would you desire that the Legislature, by Act of Parliament, should require that it should be so?—Not at all; I am only speaking for my own district, and my own neighbourhood; I do not express any opinion about others.

11945. Whatever preference you individually may have for weight over measure, you do not wish an arbitrary Act of the Legislature to impose weighing where the custom of the district does not adopt, inasmuch as it would not be convenient, perhaps, in all cases, that it should be adopted?—Certainly not; while speaking on weight, I may say that I think that the present Act of Parliament is quite sufficient to give the colliers protection from any unreasonable proceedings on the pit bank, and if you give the colliers power to interfere on the pit bank, you damage the coal owner to a very serious extent, and take the management of his property out of his own hands.

11946. Mr. *Liddell.*] I do not understand you in saying that, to object to the presence of a check weighman?—I do not object to the presence of a check weighman, but I do object to a check weighman being sent from any other part of the country to be our master; I do not want any further legislation on that point.

11947. Mr. *Greenall.*] But you do not object to the system of inspection, so that the men may be quite sure that they are correctly paid?—Certainly not. But if any individual they pleased could be appointed to be a check weighman, it would give the Miners' Union a power to put in an objectionable man who would interfere with our property, and deal with us in a very unbecoming and improper manner; I think that capital wants its protection as well as labour.

11948. Mr. *Liddell.*] I understand that, though having no objection to the presence of the check weighman, you would always wish that that man should be appointed with your sanction?—Yes, and out of my own men.

11949. That he should be a man, in fact, in whose integrity you had entire confidence?—Decidedly so.

11950. General *Dunne.*] Would it not be necessary for a man of that class to have the confidence of the miners also?—Yes, we allow our own miners to fill the place, but we do not want a man from another district to be appointed.

11951. *Chairman.*] Did I rightly understand you to say that you thought you were less liable to lose from dirt with weighing, than you were with measuring?—No doubt.

11952. Mr. *Greenall.*] You stated that some time or other you lost by the system of measuring 10,000 tons; and then by the better system of weighing, you find that you have lost from 2,000 to 3,000 tons a year?—Yes.

11953. I understood you to say that, under the system of weighing, the men were at one time sending to the ton 56 lbs. of dirt?—Yes.

11954. You interfered with them, and they sent you 28 lbs. of dirt after that?—The check weighman spoke to them.

11955. Upon the larger amount you had a loss of 2,500*l.*, and upon the smaller a loss of 1,250*l.*?—Yes; but then I added that an evil comes out of the weighing, and that is that the collier is disposed to send up all the dirt he can.

11956. But am I correct in my understanding with regard to the other amounts?—Yes.

11957. *Chairman.*] You mean to say that the collier has a greater temptation to send dirt up when it is weighed than when it is measured?—Decidedly so; because he gets paid for all he sends, whether it is dirt or coal.

11958. But did he not get paid for it in the same way under the measuring system?—Not so much; being paid by weight his temptation is to send all the black dirt the mine has in it.

11959. What was the temptation then?—To put as little in the corf as possible. If he had a 4½ cwt. corf he would, perhaps, send you 4 cwts. for it.

11960. What is your system of forfeiture under the weighing system?—The rule is, that if we get an imperfect corf or a dirty corf, we send for the man, having set aside some of his material, and show it to him; and if he should, after that, refuse to send better coal, we should send him about his business.

11961. But you have not any strict rule as to forfeiture?—Occasionally we take off, a few cwts. for dirt.

11962. I do not yet see what greater temptation a man has to put dirt in the coal when it is weighed than to put dirt in it when it is measured; he is paid for what there is in the bulk under the measuring system, is he not, and under the weighing system he is paid for the weight?—That is quite so; but being paid by the weight he puts everything in that he can find in the place.

11963. In either case the temptation to the workman is to avoid the trouble of sifting, is it not?—Under the system of measuring he would lose the entire tub, if he sent dirt with it.

11964. You mean, then, that under the measuring system there was a stricter system of forfeiture?—Yes, we were compelled to be.

11965. The only reason why measuring would be more profitable to the master than weighing would be that, under the measuring system, he had a stricter system of forfeiture than he has under the weighing system?—Not quite that. The collier had an advantage if he sent an inferior tub, and it was measured.

11966. But in the one case he was paid for bulk which he ought not to be paid for. In the other case he is paid for weight which he ought not to be paid for.—That is quite so.

11967. Then, what greater inducement is there to send dirt under the weighing system than

than there was under the measuring system, unless it be that there was a stricter system of forfeiture under the measuring system?—There would be a little more strictness under the measuring system, for two reasons: the first was, that we did not get the weight that we ought to have, and the second was, that if there was dirt in the tub it would be forfeited.

11968. What is to prevent you from forfeiting under the weighing system, if there is a certain proportion of dirt?—It is a matter of constant annoyance between the colliery proprietor and the collier, and we do not prefer having any such quarrel among our workmen. We should much prefer turning the men about their business to having constant quarrels.

11969. Then you have abandoned the system of forfeiture, not because it is inconsistent with the system of weighing, but because the system of forfeiture leads to bad feeling?—Yes, it leads to bad feeling, no doubt about it.

11970. During the time that your loss was diminished from 10,000 tons to 3,000 tons, was there a change of system from measuring to weighing?—Yes.

11971. That diminution of your loss coincides with the change from measuring to weighing, in fact?—No doubt.

11972. That extra cwt. in the ton, to which you have referred, is meant as an allowance, is it not, for what there may be defective in the coal; and that is the origin, is it not, of the 21 cwt. to the ton?—It has been the system on canals to give larger weights than those, in order to cause the coals to weigh out at the destination to which they were taken to market. The railways have established 21 cwt. to the customer, and so we sell 21 cwt., and in order to sell 21 cwt. we ask the collier to give us 21 cwt.; but, instead of giving us 21 cwt. he gives us 20¼ cwt. of coal, and, when he can, another half cwt. of dirt, which we cannot sell, but lose entirely.

11973. You say that, in consequence of the notice given to the men by the check weighman, the quantity of dirt was at once reduced from 56 lbs. to 28 lbs. in the ton?—Yes.

11974. Do you suppose that the working miner knew exactly the weight of the dirt he was putting in?—I do not believe he did, and I do not believe he cared.

11975. When you talk of 56 lbs. and 28 lbs. you talk of an average, I suppose?—That was the result of a day's work.

11976. Upon taking the average, was it not?—Yes; the average of the day.

11977. That notice was given to the men by the check weighman after your attention had been directed to the subject?—After I had begun the system of laying aside the dirt and weighing it, he then gave notice to the men of what was going forward, and they made that change.

11978. Do you think it right that the employers should have the absolute right of dismissing the check weighman?—Yes, if he should interfere with the working of the colliery at all.

11979. Of course he has the right to bring him before the magistrate if he should interfere with the working of the colliery, but do you think it right to give the employer the absolute power of dismissal?—I think it would be right for him to have the power of giving him notice, and giving the men notice to provide another check weighman if he did not do his duty properly.

11980. Do you think it right that that should be done without an appeal to the inspector?—I think so; an inspector has nothing to do with it, but he has his own duties to perform, which I conceive are defined.

11981. Do not you think that it is part of the inspector's duty to see that the master does his duty to his men?—No; I think not.

11982. Mr. *Liddell.*] Do you understand the duties of an inspector to be to superintend the general management of the mine, and to see that the ventilation is adequate, but not in any way to interfere with the arrangements between the master and the workmen?—I think that of course he has a right to look after the ventilation, or any other point that he sees wrong, but he has no right to deal with the men.

11983. There is nothing, is there, in the Act of Parliament, under which inspectors are appointed, which gives them authority to interfere between masters and workmen?—As I understand it, he has no such power, and it would be very unfortunate if he had it.

11984. In regard to this particular matter, the men themselves corrected, to a very great extent, the injury complained of (namely, the amount of dirt sent up), in consequence of its being pointed out to them by their check weighman?—Quite so.

11985. There was no other dispute that arose, was there; but things went on as before?—Yes, they went on as before.

11986. And it is preferable to have these matters settled in that amicable way, rather than to have them settled through the instrumentality or the interference of the inspector?—I think so.

11987. How often do you pay your workmen?—Once a fortnight.

11988. Are you favourable to a weekly payment of wages, or do you prefer the present fortnightly payment?—I prefer the present arrangement; I have had a little experience on that point. In 1860 we paid weekly for 12 months, for the very purpose of testing the system. At the request of the miners and workmen, we went back to fortnightly payments.

11989. What were the reasons that induced the workmen to ask you to revert to the fortnightly system?—I think it was as inconvenient to them as it was to ourselves.

11990. Perhaps you will explain the inconvenience that they suffered?—I cannot say exactly what their reason was, whether it was a matter of habit, or what it was, but they preferred it; and not long ago, when I made arrangements with certain colliers at a particular pit, they declared that they did not want the weekly payment. I may say, that if we resorted in large collieries to weekly payments, our head-viewers, under-viewers, stewards, and other parties employed by us, would be occupied from two to two and-a-half days in taking up the work, and during that period they could not be attending to the management of the mine; that is the most serious objection I see to it.

11991. Will you explain that phrase "taking up the work"?—I refer to work in the way of measuring off the headings, going down to the offices, and arranging all the details and matters belonging to the system; and it takes your clerks the same work too. While the viewers and under-viewers, and those people are taking up work, they are not attending to the management of the

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the mine. To me it seems a very serious and most responsible thing to interfere so far as that with the management of a colliery.

11992. Then, in addition to the objections of the workmen to weekly payments, which you have described, the actual business of the pit would materially suffer from the adoption of one system over the other?—No doubt of it; it must be so inevitably; there is no getting out of it.

11993. And if the operations of the pit are to go on as usual it would necessitate an increased staff, would it not?—It would, according to the statement which I have made, and that is my most serious objection to the weekly payments. I would go to the expense of clerks, and anything else, but knowing the nature of a colliery, and understanding the business of a colliery myself, I do most seriously object to the staff being taken off to attend to the mere detail of taking up work once a week instead of once a fortnight.

11994. It would involve, or might involve neglect of the most important matters connected with the management of the colliery, might it not?—It would do so inevitably. Our officials being occupied in that way they could not give the requisite attention to ventilation, or to the other details, that are at all times necessary to be attended to.

11995. Then it would come to this, that you must either incur risk from these important matters being neglected, or you must increase your superintending staff to take the place of the viewers engaged in taking up the work?—There is no doubt that that would be the effect; I would make another observation, and that is, that I think the matter of wages ought entirely to be left as a matter of agreement between the master and the men, and that we ought to have no legislation on the subject.

11996. Mr. *Greenall.*] What is the amount of a fortnight's pay, how much money do you pay every fortnight in wages?—For the whole establishment we pay from about 1,600 *l.* to 2,000 *l.* a week.

11997. Mr. *Liddell.*] Can you state what the earnings of your pitmen are?—In one colliery employing 250 hands, non-unionists, where they have been working straight on for years and years, a good experienced miner can earn as follows; I have taken three instances; I have a great bulk more if it were necessary, but it is not necessary to go into them; the managing man of a bank can realise 8*s.* 11*d.* per day of eight hours, 9*s.* 5½*d.*, and 11*s.* 1*d.*

11998. Is that a hewer?—Yes.

11999. Have you taken three distinct branches of work?—No; they are all three hewers, or managers of a bank.

12000. What makes the difference in the amount earned?—The skill of the men.

12001. Is that an average, or was it taken on one particular day?—It is an average of two months' work.

12002. Mr. *Fawcett.*] Would it represent the general average for a year?—It has been taken for two months.

12003. Mr. *Woods.*] How many men would it extend over?—These are three particular men, and all the rest are very similar; I can give the average of the pit, if necessary.

12004. Mr. *Liddell.*] Are these net earnings; do these men employ their own boys, or are there any deductions whatever to be made from the earnings which you have given?—Nothing; they are the net earnings of the men.

12005. Mr. *Fawcett.*] Are not candles and powder to be deducted?—They have been deducted. I can state that the average of 20 sets which I have taken is 7*s.* 6*d.* per day.

12006. Mr. *Greenall.*] Could you, without much trouble, tell me, not how much a man may earn, but how much a man has earned in 12 months; the highest wages you have paid to a hewer in 12 months?—It must be remembered that there is a great difficulty in taking out the wages of a man for 12 months, because you do not know how many day men he is employing.

12007. You would know from your book the amount which you had paid him?—Yes, but there are allowances out of that, and you have to go through the book and deduct them; these, which I have just given, are the net earnings for a period of two months.

12008. It would not be a fair thing to multiply them by six for a year, would it?—I should say it would, because they have all the same work to go to; but I think it important to state to the Committee that I have another class of men who have earned 8*s.*, 10*s.*, 12*s.*, and 14*s.* per day of eight hours, and these men (at least 400 hands) were instructed to strike for an advance of five per cent. on these wages, by John Normansell.

12009. Mr. *Fawcett.*] When you say "another class of men," what do you mean?—They are colliers working at another pit.

12010. Mr. *Liddell.*] They are hewers, I suppose?—They are hewers.

12011. You say that you have another class of men who earn 8*s.*, 10*s.*, 12*s.*, and up to 14*s.* a day?—Yes.

12012. And that those men were, by some person or persons, induced to strike for a further advance of wages?—Yes, of five per cent.

12013. Did that effort to induce them to strike succeed?—Yes, and they have been on strike six months.

12014. Mr. *Fawcett.*] When you say that these men struck who were earning 8*s.*, 10*s.*, 12*s.*, and 14*s.* a day, can you state to the Committee that those were the average earnings for 12 months previous of those men employed in that particular pit?—Yes, that would be the rate of wages they would earn when at work.

12015. You state that positively, do you?—I say so, and I have a great deal of further evidence to give upon that subject, because I have some unskilled men working in the same places earning 8*s.*, 9*s.*, and 10*s.* per day in the eight hours.

12016. Then some of the unskilled men earn as much as some of the skilled?—According to that, but they do not run to the 14*s.* as the skilled men do.

12017. There seems to be a discrepancy. In the one case you said that you could only give us an average for two months, while in the other case you say that you can give us an average for 12 months; how is that?—Because I know that they have been working at the same work, which would leave them the same uniform wages from month to month.

12018. Mr. Greenall asked you to give the average earnings for 12 months, and you said you could not do it; but in the case of another pit you give us the average for 12 months, how is that?—We know that whenever they go into the mine they can earn that money.

12019. That

12019. That is not a direct answer to my question. You state in one case, in reply to an Honourable Member, that you cannot give the average earnings of the men for a twelvemonth, but only for two months; while in the case of another pit you say that you can give us the average for 12 months, how is that?—It is a matter of belief, I do not say that it is the fact.

12020. Then the first statement about the two months is to be taken by the Committee as a matter of fact, and the second as a matter of belief?—No, not that.

12021 The other amounts are only earnings according to your belief?—No, it is the fact that they were earning that money, and I believe that they were earning it for 12 months together.

12022. What I want to come to is this: you say that for the last week before they struck they received those amounts of wages?—For several weeks before.

12023. But you cannot state positively that it was their average for the year?—It is my belief.

12024. *Chairman.*] I understand that, having tested what the actual earnings were during two months, you extend that to a year, because you say that the rate of payment was the same; and therefore as they did earn that during two months, they might have earned it, if they chose, during the rest of the year?—That is what I believe.

12025. Mr. *Greenall.*] Supposing a man to earn 14 *s.* a day, that would represent something like 4 *l.* per week?—Yes.

12026. Do you know an instance of an individual collier, a hewer, receiving in wages as much as 200 *l.* a year?—I do know many instances of their working at that rate, if they had full work. A sale colliery does not work every day, so that you cannot multiply that amount to get the true result. But then I have two months of unskilled men. I have the case of three unskilled men going into these very places which I have been speaking of before, who have actually, during the last six weeks, earned 8 *s.*, 9 *s.*, and 10 *s.* per day of eight hours.

12027. Sir *Philip Egerton.*] That is to say, for the days they worked?—They worked every day; at least 11 days a fortnight.

12028. Mr. *Woods.*] But were they down the pit eight hours, or have you averaged them at eight hours; how have you arrived at eight hours?—Because they work eight hours only, and I infer from that that a good skilled collier could earn from 1 *s.* to 3 *s.* per day additional.

12029. Mr. *Liddell.* What is the nature of the coal in your colliery; is it a soft coal?—Tolerably so; it is both soft and hard; it is the Silkstone coal.

12030. It is a tolerably soft working coal?—It is a tolerably soft working coal.

12031. General *Dunne.* I think you said that you did not pay butties at all?—We do not. To some extent it is the butty system; we let a man a bank, and he employs two or three men under him; it is not what is called the butty system.

12032. Does he pay the men?—He pays the men.

12033. You only pay him so much?—So much the ton.

12034. And in your calculation, you calculate how much he receives?—Yes; and whenever we take a note, we are satisfied that the men are there on the days which we deduct from his wages, and we take from him, in our calculation, everything he has to pay.

12035. When you state the earnings to us, have you made the deductions?—Yes; it is the clear net earnings of the men.

12036. In this district where you are, was the rise of 5 per cent. of which you have spoken universal?—It was general in the district.

12037. Therefore you pay no more than the rest of the district?—I do not pay the 5 per cent.; I object to pay it on these large earnings. I was willing to pay 5, 6, or 10 per cent. on the men's earnings where they were not earning more than 5 *s.* a day, but not on the large earnings of which I have spoken.

12038. You said that the men were instructed, or put up by somebody, to strike; what did you mean by that?—I mean that the union miners' executive in Barnsley, presided over by Mr. Normansell, instructed our miners to strike, and they have struck. There has been a constant intimidation brought to bear upon the workmen we have recently got, to prevent their going to work at our collieries by the unionists' turn-outs.

12039. We will not go into the details of that case; you mean, I presume, that there is a power which can induce the men to strike; the power of associations?—Yes.

12040. Are there any associations of masters to resist that?—To some extent.

12041. Sir *Philip Egerton.*] Has your evidence reference solely to coal mines, or also to iron-stone mines?—This has reference to coal mines entirely.

12042. Mr. *Woods.*] If I understand the system rightly, this ideal man, whose wages you have given, is a contractor?—Yes; he takes a bank, and employs two or three hands.

12043. By day wages under him?—Yes.

12044. Then these large wages which you have stated, are not the average earnings of a man employed in hewing the coal, but they are the earnings of a contractor?—He is a hewer of coal.

12045. He is a contractor who employs day-wage men under him?—He employs one man and a boy under him; but then I have stated the net earnings of the hewer.

12046. Is it correct to assume that those are the wages of a superior workman, a hewer of coal, who employs other workmen by day wages under him?—Yes; they are the earnings of a fair average collier.

12047. What is the man called who works under this man who you say is a collier?—He would be a filler, and there will be a boy, a hurrier.

12048. Is it a fair assumption, from your evidence, that the number of men in your collieries so employed are one-third of the whole?—Yes.

12049. You have said that there was one of these men to a man and a boy; that is one to three?—Something like that, as near as I can tell.

12050. With reference to weekly payment, are the same men who must necessarily take up the work, the most fitting persons to superintend the underground working of the mine?—They are the only men who can do it.

12051. Can you state whether it is the fact that good ventilation in a colliery is mainly secured by careful attention to the daily recurring details of the colliery?—It must be attended to either every day, or every second day at all events.

12052. And therefore you would say that the mere observation of the quantity of air going up

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and down the shaft is no guarantee that there is good ventilation in the colliery?—Not throughout the works.

12053. And that therefore any visit by an inspector taking such a cursory observation as that, would be of very little practical utility?—Of course, if he comes to inspect, he must go through the mine, and look at it to some extent.

12054. Mr. *Fawcett.*] I want particularly to clear up a part of your evidence that I cannot understand; you have told us that there are some men who earn 10*s.*, 12*s.*, and 14*s.* a day; I want to ask whether, although they may hew coal, they do not employ men under them?—One of those hewers will have two hands under him as an average.

12055. Mr. *Liddell.*] To draw his coal?—To fill it and draw it.

12056. Mr. *Fawcett.*] Not to help him hew?—Not as a rule; he is the hewer and they are the assistants.

12057. What do the assistants earn?—A boy of 16 years of age will get his 3*s.* 6*d.* a day.

12058. Has the hewer never a man to assist him?—If he has a man he will give him 5*s.* or 5*s.* 6*d.* a day.

12059. Therefore it comes to this: that quite one half of the men working in the mine only earn 5*s.* a day?—Those are not men.

12060. You say that the hewer employs one man and a boy?—Yes.

12061. Therefore if each of these men, getting their 10*s.* 12*s.* and 14*s.* a day, employs a man (as well as a boy) to whom he gives 5*s.* a day, am I not correct in saying that half the men employed in the mine are only getting 5*s.* a day?—I do not think that half the men employed in the mine are getting so little as 5*s.* per day.

12062. I will put it in this way; just the same number as there are hewers in the mine, only get 5*s.* a day.

12063. Should you not call those men, who are assistants of the hewers, colliers?—They are assistant colliers, one is the filler, the other is the hurrier.

12064. Do they come under the general acceptation of the word "collier," when people are speaking about colliers?—No doubt.

12065. Mr. *Woods.*] What do you call them in your country?—They are colliers, no doubt, because they work in a coal pit.

12066. Mr. *Fawcett.*] Therefore it would be incorrect to assume that 10*s.*, 12*s.*, and 14*s.* represent the average earnings of the men who work down in a mine?—Not all the men.

12067. It does not represent more than half of the number of men employed in the mine, does it?—Perhaps not.

12068. *Chairman.*] As to the weekly pays, I understood that your chief objection to the weekly pays was that they interfered for a time with the proper arrangement of the mine in respect of ventilation?—Yes, and other things, viz., the general inspection of the work of the mine.

12069. That they interfered with the safety of the mine?—They would interfere with the safety of the mine.

12070. Do you mean to say, then, that the proper precautions for the ventilation and safety of the mine are neglected every fortnight?—To that extent they are.

12071. You mean that there is some suspension of the ordinary care every fortnight?—No doubt of it.

12072. As to the 14*s.* a day, you mean that that is the amount earned after the man has paid his people under him, I presume?—Yes.

12073. And he has, sometimes, more than two under him?—Two is the average; that is about the average, at least.

12074. Have they not sometimes three or four under them?—Very rarely.

12075. That 14*s.* represents the profit that the man makes by employing people under him?—By his own earnings, and by employing people under him, of course.

12076. They help him to hew when he is tired, I suppose?—He has the control over them, and he manages them in some way. If you put the 5*s.* and 11*s.* together you come to a very respectable average, at all events.

12077. You think that a good hewer in eight hours, after paying his expenses for carrying and hewing, can do enough to make 14*s.* a day?—Yes; the average I gave was from 8*s.* to 14*s.* per day.

12078. Do you think he could do more in 12 hours?—No doubt.

12079. Could he work as hard for 12 hours as for eight hours?—I think not.

12080. Do you think that there is much difference between the amount of coal that was formerly got in 12 hours and that which is now got in eight hours?—The eight hour system greatly reduced the quantity of coal sent out of the pits throughout South Yorkshire collieries. I can tell the Committee the difference that it made to us, as coal-owners; when we came down to eight hours, instead of ten hours, it cost us 6*d.* per ton extra money to bring the coal to the pit bank.

12081. Have you calculated the difference of the get of coal under the eight hours' system as compared with the get under the 10 hours' system?—There is a difference; at least 20 per cent.

12082. But the difference did not correspond with the difference in the amount of time, did it?—Yes; the extra cost of getting the coal is 6*d.* per ton, caused by sending a much less quantity.

12083. Did the get of the colliery decrease in the same ratio?—The get of the colliery decreased in about the same ratio.

12084. Mr. *Liddell.*] When the number of hours was changed from 10 to 8 it cost you 6*d.* a ton more to bring the coals to bank, I understand you to say?—Yes.

12085. Did you recover that in the advanced price in the market?—We might recover it or we might not; we took the market price as we found it. We cannot raise coal against the Derbyshire people, who are working 10 hours.

12086. They undersell you?—They undersell us; they keep us in check.

12087. I want to know whether, as a matter of fact, you raised the price of coal 6*d.* per ton?—By no means.

12088. Then you were the losers by it, and you did not recover it from the consumer?—Not at the time.

12089. Have you increased in that proportion the price of your coal at the pit's mouth since then?—No doubt the price of coal has increased at the pit's mouth, but not to the extent of that 6*d.*, I think.

12090. The inevitable tendency of these reduced hours, or of anything that increases the expense of working below, is to increase the price to the consumer, is it not?—Yes.

12091. You

12091. You are out of pocket by the reduced number of hours which the men work?—Yes.

12092. Sir *Philip Egerton.*] Should you say that the reduction of the hours of labour by the men in one pit produced a corresponding reduction in the quantity of coal got by that one pit?—Yes.

12093. Mr. *Greenall.*] You have had a great deal of experience in collieries, and can tell us whether there has been a greater advance per cent. in wages or in the price of coal?—I can give you the exact advances, from which it will appear that the larger advances are in wages. I have taken the three years, 1843, 1844, and 1845, and the three years, 1853, 1854, and 1855. During that period wages advanced 9 per cent. Then I have taken the three years, 1863, 1864, and 1865, and I find that from 1853, 1854, and 1855, to 1863, 1864, and 1865, the advance was 33 per cent. That makes 42 per cent in wages. Then I have another item to add; we have increased the value of the work by altering the work at least 15 per cent. to the collier.

12094. Mr. *Liddell.*] By improved machinery do you mean?—By improved modes of work; that makes altogether 57 per cent in 20 years.

12095. That means an increase of 57 per cent. in the working expenses of your pit?—Yes; I have the facts by which I could prove that to the Committee.

12096. Can you, by way of comparison, with that immense advance in the working expenses of the pit, give us the increased price of coal?—I have not got it quite for those periods, but I could get it.

12097. Either the profits arising from the working of this particular colliery must be immensely diminished, or else, I presume, this increase of the working expenses must be made up by the increased price of the coal at the pit's mouth?—The increase of price has gone on, but not in proportion to the increase of wages.

12098. Do you mean that the whole expenses of working your pit have increased 57 per cent.?—Yes.

12099. Mr. *Woods.*] Are there not some fixed expenses in the working of a colliery which have no reference to wages, or very little reference to wages?—Always.

12100. Mr. *Liddell.*] Will you analyse that 57 per cent. and tell us, under each head, the exact amount of increase during the period which you have mentioned?—The increase of actual wages in the first instance was 9 per cent., and the increase in the next 10 years, was 33 per cent.; then we went to a large expense in altering the nature of the work, and made it better for the miner considerably, for which we ought to have taken at least 15 per cent off the price of the work, but we gave it to the miner, and that furnishes the reason why our wages are so high. We did not take anything away from the colliers, and yet we went to other costs, which produced the effect in heading out and changing the nature of the work.

12101. Mr. *Greenall.*] Can your tell me what, in that period during which the 42 per cent. advance in wages occurred, was the selling price of coal?—I can in this particular colliery, because I have it stereotyped on my memory. The average price of the best Silkstone coal at that period when it was lowest would be 6 *s.* 6 *d.* a ton, and now the average price of the Silkstone coal, as a whole, is not more than 7 *s.* 6 *d.*; all I wish the Committee to understand from these statements is this, that it is an anomalous thing that the colliery giving the highest wages of any in the kingdom should be advised to stand out for an advance of 5 per cent. on those high wages.

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12102. *Chairman.*] With reference to the weekly payments, is there any weekly payment of wages in your district, and are there any peculiarities where the wages are paid weekly?—Yes.

12103. Does Mr Charlesworth pay weekly?—I do not know.

12104. In those collieries where they do pay weekly, do you hear any complaint of the results?—I do not; some approve of it, and some do not.

12105. There is a difference of opinion?—There is a difference of opinion.

12106. Mr. *Liddell.*] Are there any truck shops in your district?—None.

12107. In regard to the schools, and the means provided for education, have you any statement to make to the Committee?—Our workmen have villages all round them for miles, and there are schools in every village. We support two schools ourselves. We have been instrumental in building—or, at all events, coal-owners have been instrumental in building—one Church of England church, two Wesleyan churches, and two chapels, in the immediate district; so that we have cared both for their spiritual wants and also for their secular instruction.

12108. Do a considerable portion of the children attend schools?—A very large proportion.

12109. Have you the figures?—I have not the exact figures.

12110. What is your opinion in reference to the employment of boys; first of all, has the Act been complied with, in your case, in regard to the age?—Yes; we have very few employed under the age of 12. But we wish to state to this Committee that we have thin coal mines varying from 2 feet 2 inches to 2 feet 8 inches thick; and unless boys are permitted to go into those mines early, they will not go near them; and the consequence will be that our property, which represents something like an amount of 25,000 *l.* involved in those mines, will be seriously jeopardised; and we do, therefore, as coal-owners, protest against any further legislation on that subject.

12111. What would be the effect if boys were not permitted to work more than eight hours a day?—The effect would be to depreciate the colliery property 25 per cent. There are not facilities for drawing with us, and we cannot keep pace with the output of coal so well as they can in the thick coal districts. The consequence of a restriction of boys to eight hours' labour would be that it would diminish our draught of coal quite to the extent of the reduction by the two hours; that would be a fifth. We have small corves, and we require more time than others to draw the proper quantity, and if the boys were limited to eight hours we could not get the quantity of coal out; it would be impossible.

12112. Do I rightly understand you, that they are working these thin seams very extensively in your district?—Yes, we work them extensively. My notion is that the miners' union are seeking to shorten the hours, and as they cannot get it on the men they are craftily seeking it through the boys. Now, if you legislate that the boys shall only work eight hours, a

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miner will only get six hours, so that it will be practically reducing his labour down to six hours. Further, I wish to state, that the work of boys is not oppressive; they are attending to trap-doors, coupling and unhooking corves on inclines, and that sort of thing, which is not at all oppressive.

12113. Do you agree with former witnesses in regard to the inconvenience and danger which would attend changing the shifts of boys if there were a double shift.

12114. It would be impracticable?—Then you agree with the former witnesses in their description of the inconvenience which would attend the working of the mine if you did adopt two shifts of boys?—Quite so.

12115. Mr. *Forster.*] What are your hours of drawing coals in your district?—Not more than 10; generally about nine.

12116. What time does your engine start in the morning?—At a quarter to seven it begins to draw coal.

12117. How many hours are your boys down?—We wish them to be down 10 hours; they should not exceed that; that would only involve nine hours' work.

12118. Is the fact of your time of drawing being limited to from nine to ten hours a consequence of the men only working eight hours?—Yes.

12119. General *Dunne.*] Do you find that since the hours were shortened to eight hours, there is as much coal raised by colliers as when they used to work 12?—No, indeed; they are reduced in proportion to the hours.

12120. That evidence was given, and I wanted to know if you agreed with it?—I do not.

12121. *Chairman.*] I think you said, in answer to another question, that the decrease in the get was not in proportion to the decrease in the number of hours?—If I did say so, I should not have done.

12122. In your collieries the boys stay down two hours longer than the men, I suppose; because you say that if the boys were reduced to eight hours it would bring the hours of the men down to six?—It must be borne in mind that that includes their meal hours.

12123. But whatever the deductions may be, whatever time the men stay down, the boys must stay two hours longer, as I understand you?—Yes.

12124. Is that peculiar to your collieries?—Yes, in consequence of the thinness of the mines.

12125. It requires a longer time to clear away the coal in those mines?—Yes.

12126. Do you not think that means might be found of remedying that difficulty?—It is impossible.

12127. Have you heard anything of the hydraulic machine for cutting the coal?—Yes, I have heard of it, and I am making machines for myself to supersede the hewers; but I have not arrived at that yet. I hope one day to get the coal by cutting it by means of an iron man instead of by muscular power.

12128. Would it not be possible, by improving the tramways, to get over the difficulty?—That is impossible; we have the best tramways in the kingdom.

12129. Might it not be possible still to improve the tramways, so as to make the corves run smoother and quicker on them?—We have already attended to that, and they cannot be improved; our tramways are equal to the Great Northern Railway.

12130. Then I understand you that you know of nothing to lighten the labour of the boys?—It is impossible; from the thin character of the seam you cannot get the material out in any other way.

12131. The men, then, with you are down eight hours, and the boys are down 10; that is about it?—Yes.

12132. Including meal times?—Yes.

12133. The boys come down with the men, I suppose, only staying two hours later?—They go down principally with the men; we do not begin to let down before six o'clock, and at a quarter to seven we reckon to begin drawing coal.

12134. Mr. *Liddell.*] Have you any females employed on or about your collieries or pit banks?—No, except a few who fill ironstone on pit hills; perhaps 10.

12135. What is the condition of those women employed on the ironstone mines?—They are pretty fair; they are as respectable as any other females.

12136. Is the work hard?—Not hard; they merely turn the ironstone and help to fill it into carts.

12137. I should like to have your opinion as to the appointment of sub-inspectors?—It would be a great mistake to employ sub-inspectors.

12138. You agree, then, with former witnesses upon that point?—Yes, I do.

12139. Are you of opinion that the accidents are caused, for the most part, by a want of skill in the agents, the overmen, and the chief managers, or from any lack of diligence and want of care on the part of subordinate officers of mines?—I am not of that opinion at all. The bulk of our accidents arise from the carelessness of the workmen themselves.

12140. Did you hear the evidence given by the last witness in regard to explosions?—I did not.

12141. Do you agree with him in thinking that with regard to some of the more serious accidents arising from explosion, the cause of such accidents is in some cases attributable to what he describes as a want of moral courage, on the part of the manager, in forcing an improved system of management upon the owner?—No, I do not. I employ a viewer myself, and I think we manage to insist upon all the discipline that is proper to be enforced in a colliery.

12142. In the event of your viewer suggesting any improvement in a pit, should you be at all times anxious to attend to that suggestion, or to satisfy yourself of the necessity for it, and then to adopt it?—Certainly.

12143. Should you consider that if improvements of that kind were suggested the responsibility of neglecting to follow the suggestion would rest with you in the event of accidents occurring?—Of course.

12144. And looking at it in that light, would it be your interest, as well as your duty, to attend to any such suggestion on the part of your manager?—Yes, of course.

12145. Did I rightly understand you to say that the generality of the accidents arising from falls of roof, are owing to carelessness on the part of the workmen?—Yes, that is so.

12146. The duty in removing the props is a very

very delicate duty, is it not, at all times?—Yes; it is an important duty.

12147. Is it always performed by a particular class of men specially charged with that duty?—It is done by the collier himself, with us.

12148. Is the fireman always present?—No; we expect the collier to be competent to deal with that question himself; that is part of his duty, part of his engagement, for which we pay him in the tonnage, under the direction of the viewers.

12149. When props are removed, is the viewer necessarily present?—He is present whenever it is necessary; but the man is responsible for his working place.

12150. You have been employing a good many new hands lately, have you not?—A few.

12151. Would you trust the new hands to remove props?—Not without superintendence.

12152. Then, in case of a certain number of new hands being engaged in any particular working, should you give special orders to the viewer to be present when the props were removed in that working place?—Yes, either the viewer or the underviewer.

12153. If they were old hands, would the presence of the viewer, in your opinion, not be so necessary?—It would not be so necessary.

12154. I dwell upon this point, because I am right in supposing that this is a very fertile source of accident, and an operation which is in itself a delicate one, am I not?—You are quite right in that.

12155. Mr. *Woods.*] You said just now that the damage by removal of props was frequently caused by the carelessness of the workmen; I think, perhaps, you will qualify that a little; it is a very dangerous operation to remove props, is it not?—Not so much with us.

12156. At any rate, whatever the danger is, it is incident to working underground in mines; it belongs to that kind of work?—Yes, quite so.

12157. As to the responsibilty of the viewer, you were asked if you would object to any suggestion that your viewer made; the responsibility is upon you if you are the owner, is it not; the viewer is not individually responsible, but you are individually responsible?—He is responsible for performing his duties.

12158. You are legally responsible, are you not; in case an action was commenced against you under Lord Campbell's Act, you would have to pay the damages?—No doubt.

12159. *Chairman.*] Where do you keep the wood for the props?—On the colliery.

12160. At the mouth of the pit?—We always have a sufficient supply anywhere, including a supply in the mine itself.

12161. What is your rule as to carrying the props; do the workmen fetch their own props?—The workmen have very little to do with it in the tramming; we do all the tramming, that is the hauling by ponies, and the miners have very little to do in that respect; we always provide them with a sufficient quantity.

12162. The miner props his own working place?—He does; but we always find him material.

12163. In some mines they take the props to the workmen, in other mines the workmen fetch them themselves; what is your practice?—We carry them to a convenient distance from the miner.

12164. What do you call a convenient distance?—Within perhaps 50 or 100 yards from his place.

12165. You do not deduct the props from his wages, do you?—Certainly not, unless he loses them improperly.

12166. Have you heard of that being done in any colliery, and the owner charging the collier for the props he used?—I should think it very unusual.

12167. Should you think it a bad practice?—It is a practice which I do not follow, at all events.

12168. Mr. *Liddell.*] Are you favourable to the suggestion that agents over men, and chief managers of mines, should be subject to examination by Boards of Examiners, and hold certificates?—I think that the coalowner, being the responsible party, should have the appointment of his own officials; and my opinion on that subject is, that the most efficient and the best managers of collieries are to be found amongst men who come from the ranks of practical miners. I know that scientific knowledge is useful and proper, but sound practical knowledge is indispensable.

12169. And that can only be acquired by long practice and experience in the colliery itself?—That is so; and theory without practice is of no value in colliery management.

12170. Have you anything to say in regard to the coroner's inquests and the constitution of juries?—I think that the present mode is by far the best, because if you were to appoint practical miners to form a portion of the jury we should wish to have coalowners or viewers in the same number, and I think that it would not be so impartial or so effective, or so good as the present mode.

12171. *Chairman.*] Did you ever hear of the Belgian lamp?—I have not heard of it.

12172. I refer to a lamp with the glass at the bottom?—I use the Clanny lamp, with a glass at the bottom, and it gives a very excellent light.

12173. And is there gauze above the glass?—Yes.

12174. That is what I refer to when I speak of the Belgian lamp?—We use that extensively.

12175. Do you use it merely for the viewers, or for the working miners?—For the working men.

Monday, 2nd July 1866.

MEMBERS PRESENT.

Mr. Clive.	Mr. Liddell.
General Dunne.	Mr. Neate.
Sir Philip Egerton.	Mr. Powell.
Mr. William Orme Foster.	Mr. Woods.
Mr. Kinnaird.	

CHARLES NEATE, Esq., IN THE CHAIR.

WILLIAM MATHEWS, Esq., called in; and Examined.

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12176. Mr. *Foster.*] YOU are the proprietor of the Corbyns Hall Works, at King Swinford, in the South Staffordshire district, are you not?—Yes.

12177. You are a magistrate for the counties of Stafford and Worcester, and President of the Mining Association of Great Britain, I believe?—Yes, I am.

12178. I think you are also the manager of extensive works in North Staffordshire?—Yes, I have been.

12179. You have been engaged in the coal and iron trade, I think, for many years?—Almost from a boy.

12180. And from your engagements you are well acquainted, I presume, with the mineral operations both of South and North Staffordshire?—Yes, I am.

12181. I think, in the conduct of your business, you have been brought very much into intercourse with the colliers and the iron workers of both districts?—Yes, there have been few occasions of strikes or disagreements with the men in either of those districts, in the last few years, in which I have not been personally interested, either in endeavouring to control them or to accommodate the differences that have existed between the masters and the men.

12182. In connection with the late Mr. Nicholas Wood, I think you were very much engaged in framing some of the clauses of the Mines Inspection Bill of 1860?—Yes, I was appointed the delegate from South Staffordshire to the Mining Association of Great Britain upon that occasion, and I had a good deal of intercourse with the Government, and with Members of the House of Commons, whilst that Bill was going through the House.

12183. *Chairman.*] Is the association to which you have referred, one including masters and men?—No; it is the General Mining Association of Great Britain, and includes masters only. I am not aware of any association that includes masters and men jointly.

12184. Mr. *Foster.*] Do you think that the Act of 1860, generally speaking, equitably adjusted the differences or the grievances which were complained of on the part of the men?—Yes, I do; I think that the provisions of that Bill were carried as far as they could be carried for the protection of the men; there was necessarily a great deal of discussion on the subject. The men were well represented, both by delegates from the several districts, and by Members of the House of Commons, and the masters were also largely represented, and the discussions were very numerous and general. The subject was very much debated in the House, and I think there were one or two divisions upon various points. As far as the ventilation of the subject is concerned, I think it was carried out then as far as it could be with any degree of practical utility.

12185. On the whole, are you of opinion that there is any necessity, after legislation so recent as that of 1860, for re-opening this question?—I think not; I do not think it would be wise to re-open it, nor do I think it possible to re-open it with any advantage to any party.

12186. Have you formed any opinion at all in your own mind as to the circumstances which led to this petition of the miners being presented to Parliament?—I cannot say that I see any great necessity for it. The petition was sent to me when it was first promulgated by the workmen's unions, and I looked it over very carefully and considered the subject very attentively. I must confess that I cannot see anything in those allegations which is founded upon any rational expectation of, or necessity for, any alteration of the existing law.

12187. Do you think, from your knowlege of the working colliers in the districts with which you are acquainted, that any great personal interest was taken by the body of the men with respect to this petition?—It is difficult for me to speak of districts with which I am not personally acquainted, but as far as respects North and South Staffordshire, I do not think the men took any material interest in it. There were delegates representing the various unions, and of course it was the business of those delegates to make various representations of grievances, and all workmen are inclined to listen to grievances when laid before them. These delegates are paid for their attendance, and they like to have influence over the workmen. I think it was taken up more as a personal affair of the delegates of the union, than from any sympathy on the part of the men themselves. In North and South Staffordshire

Staffordshire there was very little interest exhibited by the men in the petition.

12188. I will now call your attention to some of the points that have been alluded to in the evidence offered by the working miners. With respect to the mode of computing the wages of colliers, I presume that when the material raised is paid for by weight, the provisions in the Act are generally complied with, as to the placing of weighing machines on the pit bank, and the appointment by the men, if they so please, of a check weighman to protect their interests?—The mode of paying colliers with reference to the weight of coal varies so much in the different districts, that it is difficult to form any comparison between one district and another. Now in South Staffordshire, except in the case of the iron works, where the coal is brought from the pits and placed upon the banks of the furnaces, there is very little paid by weight; the workmen in Staffordshire are paid for a certain stint, that is to say, they have to cut a certain area of coal for a day's work, and that constitutes their mode of payment. I may observe that in South Staffordshire (and in North Staffordshire too, in fact) we generally employ charter masters who find a great variety of things, from wages up to almost everything else; those charter masters are paid by the ton. The charter masters pay one portion of their workmen by the area of coal cut, and another portion by the day's wages, and then a third portion are paid by the employers; the system varies almost infinitely by those several modes.

12189. *Chairman.*] What do you mean when you say that the "employers" pay one portion?—I mean the coal owners.

12190. Part of the payment is done by the charter master, and part by the employer?—It is done by the charter master up to a certain point. and the remainder is frequently done by the coal owner.

12191. Mr. *Woods.*] What do you mean by "up to a certain point"?—The charter master delivers the coals in the corves at the pit's bottom, perhaps, and then the owner will carry them up the pit and distribute them afterwards.

12192. All this goes to prove an immense variety of systems which cannot be reduced to uniformity?—That is exactly what I wish to impress upon the Committee.

12193. Mr. *Foster.*] Is the system which you have mentioned one which has prevailed for a considerable number of years?—It has prevailed within my recollection entirely in the districts which I have been connected with.

12194. And you have never had any complaints, I suppose, in reference to it?—No; all these systems and all these various expedients for raising coal and delivering it to the market, are matters of adjustment from time to time between the masters and the men, and it is very difficult and almost impossible to lay down any uniform system applicable to all districts.

12195. Therefore, as I gather, you would be opposed to any legislative enactment which should prescribe any uniform and precise description of contracts in regard to the mode of computing work done in collieries between masters and men?—I not only deprecate legislation upon that point, but I do not hesitate to affirm that it is utterly impossible to reach it by legislation. Certainly, with respect to these arrangements between masters and men, I am an advocate for the *laisser faire* doctrine, and think that the less you interfere with the thing the better, the more so because the workmen have always a remedy, and can say, "If the system is not satisfactory for us we will not work for you." And the Mines Inspection Act lays down general rules under which it is quite competent to any workman to seek a remedy for any grievance he may think he sustains.

12196. During the number of years which you have been engaged in collieries and iron works you have never known, I believe, any notice given by men in consequence of dissatisfaction with the mode of computing (I am not speaking now of the rates of wages, but of the mode of computing them) the wages for the work done?—I never knew an instance of it, and more than that, I never knew even a complaint made of it.

12197. With respect to the employment of boys, are you aware whether the provisions of Act generally have been complied with in the districts of North and South Staffordshire?—There is no doubt they have, and they have been complied with in this way, that all the boys under 12 years of age, in consequence of the legislation of 1860, have been cashiered, in fact. I recollect stating very strongly to Sir Cornewall Lewis that the effect of this Educational Clause would be to exclude all the boys under 12 years of age from employment, and the result has been that in North and South Staffordshire, and in other districts, too, I have no doubt. I may add, that if you attempt to legislate for the exclusion of boys between the ages of 12 and 14 under anything like the same conditions, it will have the effect of altogether excluding the boys between 12 and 14, as it now does between 10 and 12 years of age.

12198. Do you think that the Act, so far as it has affected the employment of boys between the ages of 10 and 12, has been beneficial or otherwise?—I am rather disposed to say that it has been beneficial to the boys. I think that the age of 10, except for a strong boy, is rather too early for boys to go into the pits. There are exceptions, of course, some boys at 10 are more able to do hard physical labour than other boys are at 12, but I think that generally speaking 10 years of age is rather too young for boys to work in coal pits.

12199. But in practice you think that very few are now employed at that early age?—Very few, and only those few in cases where, as far as my knowledge goes, the mother or some portion of the family is dependent upon the boy's wages, and then there is a sympathy on the part of the employer leading him to employ the boy who may thus get some 5*s.*, 6*s.* or 7*s.* a week towards the maintenance of his family.

12200. In order to enable such cases as those which you have described to be met, you would not wish an absolute prohibition of all boys working underground below the age of 12 years?—No, I think it is far better that the matter should be left for adjustment between the employers of the boys and the families of the boys and to public opinion. I think that legislation upon a point of that sort is superfluous legislation.

12201. Have you any knowledge how many boys under 12 years of age are employed at the

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works with which you are connected?—I have a tabular statement showing the number of boys employed at the works that I have been recently connected with, and I find that in North Staffordshire there are 25 boys employed at the collieries of the age of 17.

12202. The number employed under 12 is very small?—There are only two under 12 years of age, and those I happen to know are special cases where the families are more or less dependent upon boys, who get 6 *s.* a week each; there are 18 at 12 years of age, and they get 7 *s.* a week each.—(*The Witness handed in the Table*, vide *Appendix.*)

12203. In the evidence which we have had it has been mentioned that in the case of some very thin seams of coal the employment of boys under 12 years of age could not be dispensed with without very considerable inconvenience; can you confirm that?—There is no doubt that you could not avail yourself of those thin seams without the employment of small boys; I do not mean by that observation to have it inferred that I advocate the getting of very thin seams, and putting boys into very circumscribed and awkward situations; but it so happens that there may be very valuable seams of two feet six or three feet thick, and in those seams you must employ the smaller boys.

12204. Do you consider the work actually done by these boys laborious?—Certainly not; they are a remarkably healthy set of boys who are now working in the pits; their labour is very light; it is true that they are underground a good many hours, but there is nothing at all injurious to the physical condition of the boys in the labour itself.

12205. Do you think that, physically considered, they would bear a favourable comparison with boys employed in other descriptions of labour?—Yes; and I will mention an instance to the Committee where public attention was called to the comparison. Many years ago (I forget how many) there was a commission appointed, or some *employés* of the Government were sent down to see what the condition of the boys was in the coal pits, and a letter was sent to me to ask me to give these gentlemen facilities for examining the condition of the men and boys in my own collieries; I took these gentlemen into what is called the dining room of one of my thick coal mines, where there were 40 or 50 men at dinner; they were all stripped to the waist, the temperature being warm; I asked those gentlemen what they thought of the physical condition of the men; they said, "A finer race of men we never saw; they are fit for gladiators."

12206. Mr. *Woods.*] Was this dining room underground?—Yes; after that I took the gentlemen to 10 or 15, or 20 boys, who were employed in the coal pit, having first had them all brought together, "Now, look at those boys," I said. "They look rather pale and delicate," they observed. "Well," I said, "the men that you have been looking at were once such boys as these, and these boys in a very few years will be just such men as those whom you have recently inspected." They expressed themselves quite satisfied that the employment of the boys did not deteriorate their physical condition.

12207. *Chairman.*] How many hours labour was there at that time in those mines?—Twelve hours for the boys.

12208. For boys and men 12 hours?—Yes, 11 to 12 hours.

12209. Mr. *Foster.*] What would be your opinion as to the effect of limiting the hours of the employment of the boys up to 14 years of age to eight hours a day?—It would have the effect, as I said before, of excluding boys from employment, and would lead to employing youths at a greater age; it would be quite impracticable to adopt a shorter rate of hours for the boys than is adopted now, and if it were attempted to be enforced by legislative enactment the result would only be that we must employ boys of a greater age, and exclude the boys of a lesser age from employment.

12210. If it had the effect of keeping boys out of the mines till 14 years of age, would you find them, do you think, as ready and willing to work underground at that age as if they had been employed earlier?—No; with respect to the future class of workmen I think it would have a very prejudicial effect indeed, chiefly for the reason that if boys were kept out of mines till they were 14 they would not go to school; there might be exceptions, but the bulk of them would become idle and inefficient workmen hereafter, for want of earlier discipline.

12211. Do you think that there would be rather a difficulty in getting a sufficient number of boys for carrying on the mining operations of Great Britain, if there were that restriction as to age?—There would be, in the districts I am connected with; in fact, I have no doubt that it would be impracticable to carry it out, for that amongst other reasons.

12212. Do you think that the limiting of the hours of labour of boys must necessarily contract the working hours of the pit, supposing that boys were employed at all for that limited period?—There is no doubt it would, unless you could get a relay of boys, and in the case of a relay of boys, it would interfere very materially with the discipline of the pit.

12213. Do you see any difficulty in the way of a relay of boys?—Yes, I do; I do not think you could practically carry it out, for the reasons which I have already stated.

12214. With respect to boys working on alternate days, as has been suggested, do you see any difficulties likely to occur under that system?—It is merely another form of the difficulty; if you work boys on alternate days you must have double the number of boys that you have now, and the boys would expect to be paid as much per week for working their three days as they now are paid for working their six, or five rather.

12215. Would the boys be able to get three days' work if they worked on alternate days?—No; at the present moment, taking the collieries connected with the iron works, they do not get three days a week; and if you were to have a double set of boys, it would cut them down to a day and a-half a week each.

12216. At the present time, owing to depression in the iron trade, and to the natural slackness which always prevails in the coal trade during the summer months, what do you think is about the average employment in the Staffordshire collieries?—I should think about four days a week.

12217. Therefore, with the shortness of work occasioned by depression of trade, and the Mondays

days following the pay days, and other holidays, these boys are not continuously employed for the six days of the week, for the number of hours which you have mentioned?—No; I should think that five days a week was quite as much as could be reckoned upon throughout the year; what with shortness of trade in the summer, accidents in the pit, and the disinclination of workmen to work on Mondays, and from various other causes, I should think that even in the best regulated collieries five days a week would be the maximum on which you could reckon all the year round.

12218. Mr *Woods.*] When you speak of accidents, in this instance, you mean accidents to the machinery, do you not?—Yes, and necessary repairs.

12219. Mr. *Foster.*] With respect to the employment of females about pit banks and collieries, are they so employed in the district with which you are acquainted?—I think that in North Staffordshire there are few or no women employed: in South Staffordshire there are very few women indeed employed upon the coal pit banks, but there are a good many employed upon the ironstone pit banks.

12220. Is the labour hard in its nature?—Not at all; it was only a week ago that I was talking to some three or four women employed on the pit banks of one of my own ironstone mines; I told them that there was a Committee sitting to discuss the propriety of their being employed at all on the collieries, and the answer they made to me was that they wished the Committee would mind their own business, and let them mind theirs. I asked the rate of wages that they were getting; they were getting 1*s.* 6*d.* a day, they said, or 9*s.* per week; one was a married woman, she had got earrings in her ears, and was very decently dressed; two of them were unmarried women, sisters of the men employed underground. I must confess that to adopt any law by which women of that sort would be excluded from labour which they evidently liked, and for which they were getting 9*s.* per week would, in my view, be a great hardship, and one quite uncalled for by the circumstances of the case.

12221. General *Dunne.*] I think I may understand you to say that you object to all legislation on the subject of the relation of workmen to employers as a rule?—I do, as a rule, certainly.

12222. There have been exceptions to that rule, however, have there not, in different trades, in the cotton trade for instance, and even in this trade itself?—Possibly; the cotton trade I am not prepared to give any opinion about.

12223. But there are exceptions as to legislation upon particular trades?—No doubt; I am not prepared to give any authoritative dictum upon the question as it relates to other trades. I dare say it may be right in the cotton trade, it may be very right in the bleaching trade, and, perhaps, in the pottery trade, and it may be right to legislate about boys, but I do not think it is called for in the coal trade now.

12224. You think that all arrangements between master and workmen should be by contract, and that it should be left to the parties to make that contract?—I think so, and for this reason (particularly now) that there is a great call for labour of every description, or has been till these last few weeks, and, when that is the case the workman can make his own terms.

12225. Do not you think that there may be exceptions as to the necessity for legislation in the case of trades where there is a particular danger to the parties employed?—If it is called for, I think it is already provided by "The Mines Inspection Act."

12226. You approve of interference with the masters by the inspectors to that extent, do you not?—Yes; I think that the Inspection Act has done good, particularly in respect of the protection of human life.

12227. You are aware that in the last few years 10,000 people have been killed by accidents connected with collieries?—I am aware of that.

12228. Do you think that that is any reason why the Government or the Legislature should interfere to take care that those accidents, as far as human ingenuity is concerned, should be prevented?—I think that they have already interfered as far as interference can do any good. I am not prepared to deny that the employment in collieries is a very hazardous one, and necessarily involves a great many accidents and a great loss of human life. Nobody can remember that better than the owners themselves. I think that legislation has been already carried as far as it can be.

12229. Do you think that the protection suggested by the Legislature is, as far as possible, carried out within the range of your experience?—I think it is.

12230. But that is a different question from the question of contract as to wages between master and men?—That is quite a different matter.

12231. You would confine legislation to that part which involved danger?—I think so.

12232. Do you think that the colliers are contented now?—It is difficult to say. Human nature is so capricious that it is hard to say when men are contented and when they are not; all I can say is that they have reason to be contented. They are getting high wages and good employment, and they ought to be contented if they are not.

12233. Do you think that the payments are satisfactory to the men?—I think so.

12234. Are they weekly in your district?—Men can always have them weekly if they please.

12235. Do you approve of the system of weekly payments?—I should not approve of its being enforced, unless you made it a rule that domestic servants, and every other class, should be paid weekly as well.

12236. Would there be difficulty in making that arrangement in your view?—I think it would be impossible without great hardship.

12237. Have you any truck system in your district?—I believe there may be some little remains of it, but, as a rule, it was exploded under the Truck Acts long ago.

12238. Do you approve of the interference of the Legislature on that point?—I opposed the Truck Acts when they were brought forward, because I preferred leaving the masters and men to make their own arrangements. There were cases in which the system involved evils, but I believe that those have been corrected by existing legislation. There have been three or four Acts, and I think that they have carried the legislation on that point as far as it is possible to carry it.

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12239. Have you read the evidence of the workmen given here?—I have read it in one of the public papers carefully.

12240. Do you think their complaints founded?—I think that they are wholly unfounded. They have not established a single point, in my opinion.

12241. Did you say just now that boys would be excluded up to 16 if the further restriction as to age were imposed?—No; but I said that if you adopted the same principle of the educational test for boys between 12 and 14, or, if you shortened their hours, it would have the effect of excluding them altogether, as the educational test has already excluded the boys between 10 and 12 years of age.

12242. Why is that. It is not required by the Act that they shall be excluded between those years?—The provision of the Act is, that the owner shall get certificates from the schoolmaster that the boy has been at school so many hours during the week, and the boy must bring a certificate to that effect before he is employed. The result has been that the masters will not trouble himself about these matters of detail, and therefore he has given directions (I have given directions, for instance, at my collieries) to take care that no boys under 12 go down the pits; and I think the same thing would take place with regard to boys between 12 and 14 if the proposed restriction were made.

12243. That is to say, provided they attended school a certain number of hours during that period?—If they could already read and write, that remark would not apply; but if you were to impose another restriction, namely, that they should only work eight hours, that would effectually exclude them.

12244. You say that the average of actual labour is five days a week?—Five days a week is the greatest number in the generality of collieries, I should think.

12245. Six days would be the very greatest number that they could work. They work as much as the workmen usually do in other trades, do they not?—No agricultural labourers work six days a week; but then their wages are lower, and they are bound to work as much as they can.

12246. Do you think that the workmen are sufficiently paid in colleries?—They are very well paid now.

12247. Mr. *Powell.*] Are you conversant with agricultural districts?—I have lived in an agricultural district all my life, and have had some little to do with agriculture myself personally.

12248. We have had it in evidence, that the working colliers, by some arrangement amongst themselves, do not work more than a certain number of hours per day, and that so working they receive ample wages; do you think that agricultural labourers restrict the number of hours of their labour by any combination of that kind?—No, I think that agriculture is very far behind colliery labour, as far as any combination of that sort is concerned. I see that in Dorsetshire there has recently been a meeting to endeavour to effect such a combination. How far that may be successful I do not know.

12249. Mr. *Woods.*] You spoke of the effect of the employment upon the physical condition of the boys. A great deal has been said about ventilation in this inquiry, and perhaps sufficient distinction has not been maintained between that ventilation which was for the prevention of explosions, and that ventilation which was for the physical good of the men employed in the mines. Having regard to that distinction, can you tell the Committee whether the state of ventilation in which the mines are maintained is such as to be prejudicial to the health of the persons employed in the mines?—Of course I can only speak of the districts with which I am connected, and, as far as respects those districts, I have not the slightest hesitation in saying that the ventilation is so far perfect as to be entirely unprejudicial to the health of the men, and very well calculated to prevent accidents from explosions.

12250. When you are speaking of the physical condition of the boys, I apprehend that you recognise the fact that it is a highly paid class of labour, and that therefore the clothing and food of persons employed in mines are better than the average condition of other people over England in those respects?—No doubt. You employ a man or a boy at a higher degree of physical labour than others, and with (to whatever extent) a deteriorated condition of the atmosphere, you must feed him up to it. An agricultural labourer, for instance, who works always out of doors, will do with much less nutriment than a collier boy who works underground, and therefore collier boys are paid a much higher rate of wages than the boys in agricultural labour of the same age.

12251. And, I presume, it is their high rate of pay, their good clothing, and their opportunity of having good houses, which you think conduce to this physical condition which you have described?—No doubt.

12252. And generally there is nothing whatever, in your estimation, in the employment of persons in collieries which tends to lower the physical condition of the persons employed in them?—Certainly not, as a rule. I do not mean to deny that there may be exceptions, but I am not aware of any exceptions to that rule.

12253. Do you believe that further restrictions as to the age of the boys would cause the supply of labour to be diverted from mining operations to other trades?—I think they would, for this reason, that there are very few cases in which boys of above 12 years of age would not be called upon, either to contribute to their own maintenance, or to assist in the maintenance of their families, and if they were not employed in mines, their labour would be diverted to other channels, and we should, by and by, have a deficiency of that description of skilled labour which is necessary to make a man a good collier, as well with the view to the work itself, as with a view to taking care that he is sufficiently experienced to avoid accidents.

12254. You were examined just now as to the number of fatal accidents in collieries; do you know how many years the number which was given extended over?—I have had all the Parliamentary papers sent to me from the inspectors particularly those connected with the district in which I reside, but I cannot speak without having the papers before me, as to the exact numbers. I have no doubt that they are very accurately given.

12255. *Chairman.*] Did you, on behalf of the coalowners of England, oppose the Act of 1860, or only some portions of it?—No, we did not oppose

oppose it; our efforts were directed to modifying it, and making it as practically useful as we could.

12256. Did you admit, on behalf of the coal owners of England, the necessity of some legislation at that time?—I believe we did.

12257. You are not quite sure then?—Yes, I may say that I am quite sure we did admit that, for the safety of the men, some legislation was required, and the Mining Association did not oppose the legislation, but their object was to endeavour to put it in the best and most useful form.

12258. Did the Mining Association abstain from opposing legislation on the subject, because they thought that it would be useless to oppose it, or because they thought that the legislation would do good?—When the Bill was brought in, and when it was brought under the notice of the coalowners of England, it was our business then to object to what we thought objectionable, and to encourage what we thought would be of service.

12259. You thought it would be no good to meet it with an absolute negative, but you would try to take the sting out of it?—To take the sting out of it where we thought any sting existed, and to encourage the healthy parts of it.

12260. What were the parts that you specially opposed?—I cannot speak to them now.

12261. Did you oppose, for instance, the restrictions as to the age of the boys?—Yes, we opposed the restriction as to the age of the boys between 10 and 12.

12262. Mr. *Woods.*] There was no division in the House on that subject, was there?—There was no division; there was a compromise,

12263. *Chairman.*] In point of fact, you opposed the restriction that excluded boys under 10, and only allowed them to be employed between the ages of 10 and 12, subject to the conditions of the Act?—I cannot say that we altogether opposed that; our opposition was directed to this; we said, "If you apply legislative restriction to boys between the ages of 10 and 12, apply it generally, and we will support it."

12264. You objected to it, as a special legislation for collieries?—Yes.

12265. And you now admit very fairly that you think that the restriction has done good?—I think it has done good.

12266. Supposing that the restriction were carried on from 12 to 14, what you would object to is rather the certificate of attending school during the time than the original certificate of being able to read and write, is it not?—I should object to the application of any measure to boys between the ages of 12 and 14, because at that age it is quite time boys began to work, and if they have not got any education before I think there is very little chance of their getting it after.

12267. Still as to the matter of the trouble involved in looking after certificates, that does not apply, does it, to the original certificate which a boy must bring of being able to read and write, but it applies to the continued certificate of monthly attendance?—I do not think that a certificate is necessary at all, if a boy can read and write.

12268. My question is specially directed to this, whether you would see any objection even if the restriction were carried on to the age of 12, so that boys should not be admitted at all under 12, to exacting a certificate at the age of 12 that they were able to read and write?—I should object to any interference with the employment of boys above 12, whether they could read and write or no, unless you applied it to the whole community.

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12269. I am not putting to you whether at that age you should require the continued certificate of attendance at school, but whether they should be admitted, even at the age of 12, unless they could read and write?—I should object to any restriction as to that; I should admit them at 12, whether they could read and write or no; it is the fault of the parents or whoever has had the supervision of them, if they cannot read and write before that age.

12270. You do not object to the certificate of age, do you?—No, I do not object to the certificate of age, but I believe that that is evaded to a great extent.

12271. That evasion is the fault of both parties, is it not?—Chiefly the fault of the parents, who are anxious to get their boys employed.

12272. But it is the fault of managers sometimes in taking informal certificates, is it not?—I believe that, generally speaking, when their parents bring them for employment the parents state to the managers what age they are, and he takes the word of the parents for it.

12273. In the Act of 1860 were the relative merits of weighing and measuring gone into?—I think there was a good deal said about it, and it was arranged at last as it exists under the clause.

12274. Was it not the question rather as to whether the workmen should have a man of their own to see to the weighing and measuring being fair than as to which was best, weighing or measuring?—There was a good deal said about that. The coalowners objected altogether to the men employing a weigher of their own choice, a stranger to the colliery.

12275. But the question of weighing and measuring was not gone into, was it?—The men were perfectly satisfied on that point.

12276. The question at that time was whether the workmen were to have a man to see that the weighing was fair, if weighing was the principle, or the measuring, if measuring was the principle?—Yes.

12277. Were you one who took an active part in that restriction which was put in the House of Lords restricting the justice man to the men of the particular colliery?—The question of weighing and measuring was not agitated at all as respects the Midland districts. I believe it applied chiefly to Lancashire, and therefore we left it to the Lancashire delegates (the masters' delegates, I mean), who took up that part of the question.

12278. Do you see any great reason for restricting the appointment of the justice man in the way in which it is restricted in the Act?—Yes, I do. I think that a great deal of vexatious annoyance may be imposed upon a coalowner, unless he has some control over the justice man; the justice man might interpose such vexatious hindrances in the way of carrying on the colliery properly that it would be almost impossible for the owner to work it adversely to the justice man.

12279. But you might give him the power of

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dismissing the justice man with the consent of the inspector, what do you say to that suggestion?—I object to that.

12280. Perhaps you object to a justice man altogether?—I do not say that I object to there being a justice man, but I would much rather leave it to be arranged between the workmen and the coalowner. I think it is quite unnecessary to have any further legislative enactment on the point.

12281. The substitute of weighing for measuring would not interfere, would it, with such an arrangement as you speak of in regard to the employing of charter masters?—No, I think not.

12282. Mr. *Woods.*] How could there be a justice man under the Staffordshire system which you described just now, where the work was partly done by the charter master, the coal being delivered over to the employer when it was put into the tub?—It would be quite impossible to employ a justice man in Staffordshire, either North or South; the mode of raising the coals there would prevent the possibility of a justice man having anything to do with it.

12283. *Chairman.*] Will you explain why it would be impossible?—In Staffordshire, both North and South, the coal is raised by charter masters. The charter master employs one man to cut, and he gives him suitable wages for cutting a certain area. He employs another man to take the coal away from the cutter and put it into corves, and he gives him so much a day. He employs also a number of boys and horses to bring the coal to the pit's bottom, and then the coalowner employs the workmen at the top. The coal is weighed by a machine placed at the top of the pit, and the charter master, who is the only person interested in the weighing of the corves, is at liberty to go and examine the machine as often as he pleases, and there is no difficulty whatever in it.

12284. The payment is by weight?—The payment is by weight.

12285. Only there being but few charter masters, and they being men above the ordinary condition of workmen, they can take care of their own interests, and are allowed to do so?—Yes; but when you say "few charter masters," it must be remembered that it is the universal practice there to employ charter masters.

12286. They do not want the intervention of a justice man between themselves and the master?—Nor do I think that a justice man is required even in the case that you have put, unless the men and the masters are on very bad terms indeed.

12287. The case that I put is the case of work being done through charter masters, and that is the common case in Staffordshire, as I understand you?—In that case no justice man is required at all.

12288. Mr. *Woods.*] Considering the question as between the charter master, who is a contractor, and the great bulk of the men who are people whom he employs, under the Staffordshire system could a justice man be employed between those two parties?—It is not only not possible, but it is not at all necessary.

12289. *Chairman.*] As a matter of fact, where the work is done through contractors, or charter masters, no justice man is employed?—No justice man is employed.

12290. Mr. *Woods.*] And any legislative enactment which attempted to set him up would be inoperative, would it not?—It would be futile.

12291. *Chairman.*] Some of the work that is done by boys might be done by men, might it not, if you could find them?—It would hardly be worth while to employ a number of men at thrice the wages to do the work.

12292. It is a question of money?—Yes.

12293. And if you would incur the expense you would find men enough to raise the coal in the thin seams?—It is a question of money; it would act as a tax on the public.

12294. Mr. *Powell.*] But could you tax the public with that?—I think you may leave the coal-master to protect his own interests on that point.

12295. Do you mean that the market would bear the increased price?—The public would bear it ultimately.

12296. *Chairman.*] Supposing that you were restricted in the mines where the seams are thin to the employment of boys above the age of 12, inasmuch as there is a great difference in the height of boys above that age, there would be a premium upon short boys, would there not?—I must confess that those are refinements in mining which I have not gone into, and which I am not prepared to discuss.

12297. You are also opposed to the legislation, as I understand, about the truck system?—I think that the legislation about the truck system is already carried to the very extreme point to which it is possible to carry it.

12298. You were against its going so far as it did go, in fact, were you not?—No, I had no feeling against it; I do not like truck, and I should do away with it in every possible way; I should leave the master and men perfectly free, as far as my feelings are concerned.

12299. In fact, on principle, you are opposed to legislation on the truck system?—I am opposed upon principle to any further legislation on the subject.

12300. And you were opposed to the previous legislation?—I would not say that; I think the two last Acts were unnecessary, but the two previous ones were perhaps salutary.

12301. Mr. *Woods.*] Is it your opinion that the existing Acts against the truck system meet the difficulties of the case?—Every possible difficulty of the case; any further attempt to legislate upon the truck system would be perfectly superfluous.

12302. Why do you say it would be "superfluous"?—Because I think they have already carried legislative enactments on that point as far as they can be carried; there are already some words in the Act that are equivocal. It says that a man shall not "either directly or indirectly" supply truck to the workman in his employ; the word "indirectly" is a very vague term.

12303. Is it your opinion that the failure in prohibiting the truck system, if there be a failure, is owing to the fact that the parties do not put the existing Acts in force?—No doubt; because any workman being paid in truck can have his remedy very shortly; he can go to the master and summon him, and have it paid over again.

12304. Mr. *Foster.*] With respect to the employment of boys above 12 years of age, you, I think, expressed yourself as being decidedly opposed to any provision which should limit the employment of such boys to those merely who had

had been taught reading and writing?—Yes; at 12 years of age I would lay no restriction upon the employment of boys, whether they could read and write, or not.

12305. Do you see any great hardships which might result to those boys, or their parents, if such a restriction were enforced?—Yes, I think you might cause a great injustice by excluding those boys from employment because of not being able to read and write, when their services might be of great value to their families.

12306. Do you think that while such a prohibition does not exist with reference to other descriptions of labour, such a prohibition in regard to collieries would be unfortunately exceptional?—I think it would be unfairly exceptional; I am a great advocate for education, but I would say, "Whatever you do in the way of education, make it general and open to every class of the community, and to every description of employment, and then I do not object to having it tried as far as the public wish it to be tried."

12307. Would you wish the Legislature to go so far as to say that in the case of a boy who, from circumstances over which he could not have control, was left at 12 years old to provide for himself, that boy should not be allowed by the State to earn his bread?—I am not prepared to go that length at present. If we were to adopt the Prussian system, and make education compulsory on all classes, it would be another affair; but I am not prepared to say now that it should be enforced, unless it were the subject of grave legislative deliberation. There is a great deal to be said for it, but many arguments might be adduced against it; at all events, I think that the physical and material welfare of boys is of very much greater importance than the mere fact of their schooling; I mean that it is far better that a boy should be able to work and get his living, than that he should be precluded from getting his living because he cannot read and write.

12308. You do not mean to discourage education?—No.

12309. Will you explain what are the means for education in operation in Staffordshire?—It is carried out by schools in every populous portion of the district, and by separate schools attached to the larger ironworks and collieries; they are very general, and very much encouraged by the employers of labour; I myself am connected with the prize scheme of the South Staffordshire Association, and I believe that it has done a great deal of good. Possibly education to some of these boys may be carried to some extreme, and they may be taught a great many things that they forget very soon when they settle to their occupation in life.

12310. The object of the prize scheme, I think, is to induce boys to remain at school till they are about 11 or 12 years old, rather than leave at an earlier period?—Yes; so that if they have a special taste for acquiring knowledge, their taste may be gratified and encouraged.

12311. Mr. *Woods.*] Your evidence against an absolute prohibition of a boy under the age of 12 working for wages has reference, I apprehend, to the fact that there is a Poor Law in England which requires indigent persons to be maintained at the public expense?—Yes.

12312. Therefore, whilst on the one hand there is the necessity upon the owners of property to maintain the indigent at the public expense, you would not, on the other hand, so long as that law remains, absolutely preclude either boys, or any other persons, from the possibility of earning their bread?—Certainly not.

12313. Mr. *Foster.*] With respect to the inspection of mines, what, in your opinion, would be the result of the appointment of sub-inspectors, as has been suggested by some parties before this Committee?—I do not clearly understand what is meant by "sub-inspectors." The word "sub-inspector" implies supervision by some one else over such a functionary. Now, if he is to be under the Secretary of State, he becomes an inspector in point of fact; and if he is to be under an inspector, he becomes the servant of the inspector, and part of the inspection. You must either place him in one situation or in the other. If you put him under the supervision of the Secretary of State, he is an inspector to all intents and purposes, and the Secretary of State, under the present law, has power to appoint additional inspectors, if he thinks proper to do so. If, on the other hand, you put him under the inspector, he must, as I have already said, be a servant of the inspector. Whether that would be advantageous or not, I am not prepared to say; but he must, if under the inspector at all, be a servant of the inspector, and be ready to do the bidding of the inspector. If you attempted to make him an independent functionary, there would be a signal failure; there would be disagreement between him and the inspector, and between him and the officers of the mines; and I cannot deprecate in too strong terms the employment of a functionary of that description.

12314. Mr. *Liddell.*] If he were under the inspector, I presume he would necessarily be under the Secretary of State too; the inspector would be responsible for his appointment to the Secretary of State, and consequently he would be part and parcel of the present system?—No doubt. Further than that, if he were the servant of the inspector, there would very probably be a great deal of jealousy on the part of the inspector lest he should try to supersede him. I think that if additional inspection were required, it would be better for the Secretary of State to exercise those powers with which he is already invested, and appoint more inspectors. Whether that is necessary I am not prepared to say. I certainly do not think it necessary in my own district.

12315. Mr. *Foster.*] You would not, I presume, wish such an inspection as would in any respect limit the responsibility of the owners of mines?—One of the difficulties in framing the Bill of 1860 was this, to take care that inspectors did not obtain such power as would interfere with the responsibility of the owners and managers of mines, and it was a very difficult thing to draw the line with reference to that. My predecessor, as president of the association, Mr. Nicholas Wood, who was a very able man, a man of great experience, and a man in whom the Government justly had a great deal of confidence, strongly insisted, "You shall not interfere with us, if you leave the responsibility with us. If we are to have the responsibility we must have the power. If the inspectors are to have the power, let them have the responsibility." I think that the line was drawn as delicately as it could be on that point. I have heard of discussions with the inspector of our district. He has said, "You must do so

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and so;" and the reply has been, "I will not do so and so." "Well," he has said, "we will have an arbitration." "Have an arbitration, if you please, but I will not do it at your dictum; or, if I do it at your dictum, I will immediately give you notice that I hold you responsible for any serious results which may follow. You shall bear the odium if anything happens, and not I." The result has been that the inspector has generally succumbed, and declined to take the responsibility, when an emphatic statement of this nature has been made.

12316. With respect to the deputy overmen, it has been suggested that such men should undergo some sort of examination; will you tell the Committee whether you think there is a necessity for such a provision as that?—It would puzzle me to know what sort of examination could meet the case. The efficiency of a deputy overman consists in these qualities, viz., sobriety, sagacity, caution, common sense, prudence, and general ability in the oversight of the operations of a mine. How you are to examine a man upon these points, I do not see. It is nothing but long experience on the part of the coalowner of a particular man that will enable him to judge whether a man is fit for the duties or not. No mere school craft will enable a man to fill that position. A man may come from a school with a little philosophical and chemical knowledge, and yet he may be utterly wanting in those requisites which make a man fit for those duties. In short, nothing but experience on the part of the coalowner can decide whether a man is a fit man for the office, and the coalowner is the best judge whether he is fit to be entrusted with the duty or not.

12317. Mr. *Woods.*] Supposing that some of these men had an examination, would you think them worth any more to you?—Not a rush. If I want to employ an overman, I send for him and catechise him. I ask him such questions as these: "Where did you work before?" What is your experience? Why did you leave your previous place?" and various questions of that sort. After that I apply to his previous employer, to whom I put certain questions about the man. If I get a satisfactory answer, I employ him. If I get an unsatisfactory answer, I decline to employ him.

12318. I suppose that for a man to be a sober man is a very important qualification for that office?—That is one of the first requisites.

12319. Mr. *Foster.*] As I understand you, you consider that the individual on whom the responsibility rests, and who has the property at stake, is the best judge as to the right men to be employed?—Manifestly.

12320. Will you explain to the Committee the mode of working the peculiar seam of coal in Staffordshire called the thick coal, and the effects of limiting such working by an Act of Parliament to one face only?—I am afraid that if the Committee were to go fully into that subject they would enter upon a field which would occupy a great deal of their time, and I am also afraid that the result would not be satisfactory to them. I may mention the fact that some two or three years ago I was called upon to read a paper on the working in the thick coal mines to the Northern Engineers' Association at Birmingham, and it was published amongst the transactions of that association. I would rather refer to that paper than go into the question now. Briefly I may state that legislation upon a subject of that sort is entirely and wholly out of the question; and you could not apply it if you were to try. You could have no uniform system. No two collieries would so far agree in their circumstances as that one system would be strictly applicable to both.

12321. Mr. *Woods.*] Probably it would be as difficult as fixing the price of bread?—Yes, or as squaring the circle.

12322. Mr. *Foster.*] Do you think that it would be as difficult as limiting the thinness of a seam which should be worked?—Quite as difficult, or more so.

12323. The thick coal of South Staffordshire has been in process of working for a considerable number of years, has it not?—A great number of years.

12324. There is not perhaps so much left in the ground as has been taken out of it?—I am afraid not in Staffordshire.

12325. You consider it rather late in the day, I suppose, for the Legislature to say just now the precise mode in which coal in Staffordshire shall be worked?—It is quite hopeless; I do not ask the Committee to take my dictum on the subject, but I assure the Committee that legislation as to the way of working the thick coal would be entirely out of the question.

12326. You may, perhaps, have an opinion as to which is the better system of working it?—If I have a case given me I could express an opinion upon it, but the circumstances vary so much that it is utterly impossible to speak otherwise than very generally.

12327. Perhaps another witness who might be brought before the Committee would give an entirely opposite opinion to that which you might express?—I do not think he would; I think I could tell the Committee what everybody would say, "You had better leave it alone, and let each owner work it the best way he can."

12328. Are you of opinion, therefore, that it would be a waste of time for this Committee to go into that subject?— I think it would be occupying the time of the Committee needlessly, for I am quite sure that they could come to no conclusion to justify legislative interference.

12329. How many years has the thick coal of Staffordshire been worked under the present system?—One hundred and fifty years, at least.

12330. The mode of working that coal formed no part at all of the Mines Inspection Act of 1860, did it?—Not at all; I may add that I have tried both systems, and in some cases I have found one the better, and in other cases I have found the other the better; but until I come into actual contact with the particular seam to be worked, and can ascertain all its conditions and all its defects, it is impossible for me to decide which is the best scheme to adopt.

12331. And the district, particularly in the case of the Rowley district, is very much intersected with faults and up-throws and down-throws, and there are a variety of circumstances which would render any uniform system of working the coal impossible; is not that so?—Yes, it would be utterly impossible.

12332. With respect to the coroners' juries which are held in the event of accidents, do you think that any change could be made in the formation of such juries?—I think not; there is no complaint

complaint whatever in the Midland districts as to the formation of the juries on coroner's inquests; the police constable summons the persons on the spot whom he thinks best qualified to be jurymen, and there is no complaint whatever.

12333. Do you think it would be of any advantage that by an Act of the Legislature such a jury should always be comprised to the extent of one half of working miners?—If you were to make an arrangement of that sort, you must have the other half coalowners, as a counterbalance.

12334. Would such a jury be fair and impartial?—I think that it would introduce a great many elements of difference of opinion, and I do not think that working colliers are exactly the sort of people to make jurymen; they are small tradesmen and occasionally retired colliers who keep little shops that are summoned now upon the jury; the fact of their having once been colliers does not prevent their being summoned.

12335. Mr. *Powell.*] Do you think practicable any legislative interference, the effect of which would be to introduce compulsion as to the mode of working mines underground?—I do not think that you could introduce anything to effect compulsorily the working underground.

12336. The answer which you have already given refers to Staffordshire; would you make that answer general in its application?—Yes.

12337. It appears to be pretty well agreed that to increase the number of inspectors would be to diminish the responsibility of the managers of mines?—I do not know that it would diminish their responsibility, provided the inspectors confined themselves to their functions of making investigations, and reporting upon them when anything was wrong; I think if they were to go beyond that, and give directions as to the management of mines, they would interfere with the coal owner's responsibility at once.

12338. Seeing that the responsibility of the coal owner touches the safety of the miner, do you think that insubordination and want of discipline would result amongst the men if that responsibility were interfered with?—I think it would; I think that the liability to accidents would be greater.

12339. Do you think that in that view of the question there would be an objection to the appointment of sub-inspectors?—I think so.

12340. Do the overmen keep any journal?—I cannot say; as a rule I should think not.

12341. Is it their duty to make memoranda from time to time?—I do not think there is any precise duty in that respect, but common sense would teach them if there were anything which required special notice.

12342. Is it occasionally their duty to make memoranda?—I cannot say; those are points which I have never gone into.

12343. You are not able to say whether it would be desirable that an overman for the efficient discharge of his duty should be able to read and write readily?—I think that even a good overman might not be able to read and write readily; but it would be an advantage, of course, that he should be able to read and write.

12344. I think in the Army that is required of the subordinate officers, is it not?—Perhaps so; but the cases are very different indeed. I think if you introduced the discipline of the Army into a coal pit it would cause confusion.

12345. Mr. *Woods.*] As a matter of fact, the overmen are expected to report anything of importance to their immediate chief, are they not?—Yes.

12346. Mr. *Powell.*] You think that the knowledge of reading and writing is not necessary for the fulfilment of their functions?—A man would be a better overman if he could read and write, but he might be a very good overman without being able to read and write.

12347. Do you find that the boys at the collieries are so much fatigued at night that they are unable to attend school with advantage?—I should think that they are very much disinclined to attend school; but as to their fatigue, if one may judge from their gambols when they come out of the pit, I should think it is very little indeed.

12348. Do you think that that disinclination that you speak of would make it very difficult to induce those boys between the ages of 10 and 12 to apply themselves to school labour after coming out of the pit?—Yes.

12349. Which should you think the best system, three hours a night on two days a week, or two hours a night on three days a week?—I think there is very little difference between them; they are both very difficult to bring into practice.

12350. Do you think that any inconvenience would arise from the Legislature giving the alternative?—Without more practical experience in the matter I hardly know how to answer the question.

12351. As now advised, you do not see any objection to such an alternative being given to you?—No, I do not; I do not think that either of the alternatives is likely to be of much practical utility; but one is likely to be about as good as the other.

12352. Supposing that there were to be a general restriction upon labour, and that the time for boys commencing labour were to be postponed to a later age, do you think that, under those circumstances, lads would not become colliers at all?—I think it very likely that that would be the result.

12353. And consequently, even if the same law were applied to all occupations, your supply of colliers would be diminished?—I think so.

12354. Therefore, even if the rule were made general, you think it would act hardly upon the colliery proprietor?—Yes, I think it would; because, to be a skilled collier, a boy must begin not later than 12 years of age.

12355. Some remark has been made with regard to the difficulty of working thin seams if you postponed the age; do you think that the difficulty is likely to be such as to raise the price of work in those seams?—I cannot say that.

12356. Do you know at all the rent which an ordinary collier pays for his house under ordinary circumstances?—The rents vary from 3*l.* a year up to 8*l.* a year.

12357. The landlord paying rates and executing all repairs?—The landlord paying rates and keeping the house in repair.

12358. Is there an ample supply of provisions in your district at a cheap rate?—The same as there is in other districts; the railroads all over England have assimilated prices very much.

12359. And the same remark applies as to clothing?—Yes.

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12360. Is there any allowance of coal to the collier?—Yes; the colliers in South Staffordshire have a ton a month besides their wages; in North Staffordshire they buy their own coal.

12361. In the wages which you have given you have excluded that allowance of coal, I suppose?—Yes.

12362. I presume that the knowledge of chemistry required is, after all, very limited for the ordinary superintendence of coal workings?—Very little, indeed; and what there is amongst the men of that knowledge is of very little use.

12363. If we took the greatest chemist in the world, he would not find much exercise for his chemical skill in the management of a coal mine?—I think not; it would be like cutting blocks with a razor.

12364. You made some allusion to the police constable summoning the jurors; you merely meant that he served a summons upon each juryman, not that he chose the men?—Just so.

12365. Mr. *Woods.*] In regard to your evidence about inspectors, I understood the general tenor of your evidence to be, that you wished that the persons exercising the powers conferred by the Act should be well-informed persons?—Yes, I think they should be well-informed men, very intelligent men, and strong men, able to go through the amount of labour which is involved in their occupation.

12366. You would object to the inspector having the power to nominate any deputies, I apprehend?—I think it would be far better that the Secretary of State should nominate them.

12367. Because he is responsible to Parliament for the persons whom he may choose?—Yes.

12368. In reference to examinations, you have stated to me already that if a fireman or an overman had been examined he would not be worth any more to you in consequence; you would also wish to know, I apprehend, the qualifications of the person who examined him?—Certainly; and I should rather take my own or my agent's examination of him than that of a professional man.

12369. In point of fact, any system of examination imposed by Act of Parliament might restrict the supply of persons, but would not increase your opinion of their qualifications, or their value to you?—Certainly not.

12370. As to the age for colliers learning their business, is it true that adult men have a physical difficulty in commencing to work in a thin mine underground; is the nature of the employment such that that must be the case?—Generally speaking, it is so.

12371. With regard to accidents, it has been recommended before this Committee and before Parliament. from time to time, that the use of patent machines for preventing the cage running down the pit, in case a rope breaks, and patent hooks to prevent over winding, should be made compulsory upon the owners of the mines; is it in your judgment a desirable or an undesirable course (speaking now only with reference to safety in going up and down mines) that the use of any particular patent should be enforced by Act of Parliament?—I should be very much afraid of applying legislative compulsion upon those points; I have a great fear always of new contrivances, and, on principle, I never adopt them myself until other people have tried them a good while, and I have ascertained their value from the experience of others.

12372. Would you rather trust to observation as to the state of the ropes from day to day, or to the accident of a particular patent machine being in proper condition at the moment it might be required?—I should be very reluctant to trust to any new machine which was not in operation every day, because I should not have had long enough experience of its utility.

12373. And even supposing that you had had experience of its utility, would you think it a desirable act of legislation which should compel you to use that machine when possibly a better might be devised next year?—I should think it a very dangerous step for the Legislature to take to make the use of it compulsory.

12374. Would you prefer to leave those things open to the choice of the owners and managers of mines, from day to day, that they might see which they thought the best?—I should much rather leave it to the owner. No one has so much interest in the preservation of the lives of the men as the owner of the colliery and the manager of the colliery, and I would leave it to the sense and prudence of those men to adopt any means that would lessen the risks that come within their observation.

12375. And you give that opinion as a person in the habit of going down mines, I suppose?—I do not now go down so much as I used to do. Formerly I used to go down a good deal, not so much from absolute necessity as to see how things were going on. I think that legislative compulsion, as to the adoption of any schemes of the sort referred to, interfering with the ordinary practice of a colliery, would be very dangerous indeed.

12376. If you were to tie up the hands of managers and owners of colleries as to the way in which they are to work their mines, whether it be as to the thick seams in Staffordshire, or as to the patent catches, or any other similar point, it might turn out, before long, that you had tied them up to work their collieries not in the best way practicable, might it not?—You would have interfered with their responsibility, and if you compel them to do anything like that, they may say, "Any accident will not be our fault, but the fault of the Legislature." I think it would be a dangerous course to adopt to relieve the coalowners of any responsibility that attaches to them now.

12377. *Chairman.*] As to the thick coal, is the same mode of working the thick coal in Staffordshire, which is most economical, usually the most safe?—I think not. I think that there is more danger to life in working the thick coal economically, than there is in working it by two workings; but there are obstacles in the way of working it in two workings which it is utterly impossible to surmount.

12378. But the objection of the workmen is to working it in two workings, is it not?—No; their objection is to working it in one working; and they want to work it in two.

12379. Which do you say is the most dangerous?—In working it in one working there is more loss of life than there is in working it in two.

12380. Which is usually the most economical?—I think that the working it in one working is the most economical.

12381. The working it in one working is the most

most economical and also the most dangerous, as I understand you?—Yes.

12382. I do not quite understand what you say about responsibility. I understand your objection to the inspector having power to give you directions to be that it would discharge you of responsibility?—Yes.

12383. But if the inspector, instead of giving you directions, refers the matter to the arbitrator, and the arbitrator enforces what were before only the suggestions of the inspector, would that discharge you of responsibility?—Clearly not.

12384. What is the difference between the two cases? In the one case, the inspector, on his own authority, tells you to do a certain thing; in the other case, it is the arbitrator who, upon the reference of the matter to him, gives you the same direction. Why does one discharge you of responsibility if the other does not?—In the case of the interference of the inspector, the inspector says, "You must do so and so." I say, "If I do so and so upon your dictum I am discharged of the responsibility;" but if the inspectors calls out the arbitrator, he calls him out in concurrence with myself, and I consent then that the arbitrator shall give a certain decision, and that I shall abide by the decision, and I cannot divest myself of responsibility in that case.

12385. Does the inspector ever make suggestions which are likely to increase the risk of the working?—Yes, he does sometimes. The general practice of the inspector is, if he sees anything wrong, or which he considers to be wrong, to speak to the overman, and the overman, if need be, speaks to his employer, and generally, in conference with the inspector, he discusses the matter. It is possible, however, that the employer may differ with the inspector; he may say, "I will not take your advice, and I will assume the responsibility of not taking it." If, on the other hand, he says to the inspector, "I will adopt your plan, but I disagree with it, and, therefore, I will leave the responsibility with you," we generally find that the inspector recoils from that.

12386. The usual objection of the manager or employer in such a case, I presume, is that the suggestion of the inspector involves unnecessary expense?—I do not think that is the common objection.

12387. The usual objection on the part of the coal master to adopting the suggestion is the increased expense, is it not?—I do not think so. If loss of life is involved, the greater expense becomes no element in the consideration.

12388. That is to say, if the master were satisfied that the suggestion would diminish the loss of life, he would accede to it; but the master's objection is almost invariably as to the expense being unnecessary, is it not?—I think it is very often so.

12389. The inspector, for instance, does not come to you and say, "You have got an unnecessarily expensive chain, a common rope would do." I can conceive that in that case you would say, "Very well, if you think a common rope would do I will have it, but you must take the responsibility." I can understand your saying that your responsibility would be lessened if the suggestion of the inspector were of that nature; but the suggestion of the inspector is more likely to be to this effect, I presume, "I do not think that that chain is good enough, it is too old, it is time to have a new chain;" in such a case as that, if you say "I will throw the responsibility upon you," I cannot see how that can be applicable?—I do not think that those are the cases that arise; if such a case as that were to arise, I do not think there is a coal master in England who would not at once have a new chain.

12390. I fail to understand the meaning of the inspector's suggestion discharging you from responsibility?—That is where there is difference of opinion.

12391. You are only discharged from responsibility in case of anything happening in consequence of your adopting the suggestions of the inspector?—Exactly.

12392. But the inspector is not likely to make suggestions that would increase the danger of the men, I presume?—I do not know that.

12393. Have you ever known an inspector make suggestions that would increase the danger of the men?—Yes; I do not know that I can describe the particular case, but the result, if the suggestion had been carried out, would have been perhaps to increase the danger.

12394. Mr. *Woods.*] Supposing the inspector made a suggestion which seemed to you to interfere with the discipline of the colliery, would that, in your opinion, be a probable cause of accident?—I should reject his advice in that case.

12395. But would it be a probable cause of accident?—It might or it might not. I must have the particular case before me to enable me to express an opinion on that point.

12396. *Chairman.*] Your experience of collieries is of collieries of the highest description, perhaps where the management is the best?—It is the best that we can make it.

12397. I will assume that to be the case, but there may be other collieries, I suppose, which you have not been practically conversant with, and in which there might be a greater necessity for inspection than there is in the case of those with which you are better acquainted?—There may be such; I have no such collieries in view now.

12398. The collieries worked by men or companies with small capital, I presume, are not so well worked as those worked by larger capital?—I dare say not.

12399. And with those collieries you are not conversant?—No.

12400. Mr. *Liddell.*] I think I rightly understood you to say that, in the selection of overmen, the valuable qualities to be looked for, are rather moral qualities?—Personal and moral qualities.

12401. Would you say that good temper, sobriety, and acquaintance with the habits and the feelings of the men, were all indispensable qualities in an overman?—Quite so.

12402. And those, I apprehend, could not be ascertained by any process of examination that could be invented?—I think not.

12403. You could discover, by examination, whether a man was a good mechanic or a chemist, but you could not possibly discover those qualities which you consider to be indispensable?—Certainly not, except by experience or from previous recommendations from parties who had had experience of those qualities.

12404. In your opinion, I presume that no amount of education would compensate for the

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want of those qualities which I have described?—Certainly not.

12405. And therefore it is that you say it must be left to the discretion of the owner or manager to select the best description of men?—I think it must. I think there is no possibility of interfering with that with any benefit.

12406. You have been asked several questions tending to the supposition that legislation should go so far as to say how a mine is to be worked. Am I right in this idea, that Parliament has said, "We cannot undertake that, but we can place an independent and highly educated practical man, as between the master and the men, who shall be empowered to make any suggestions he pleases in regard to the management or conduct of the mine, and who shall have the power further, by the machinery of the Act, to enforce his opinion upon the coal owner." Is that a correct idea of the extent to which Parliament has gone in the matter of inspection?—I think it is.

12407. And beyond that point, do I rightly understand you to say that you think Parliament ought not to go and cannot go?—I have no hesitation in saying that I think Parliament cannot go farther with any benefit.

12408. Because if Parliament goes beyond that, it practically takes the whole management out of the hands of the owner or manager?—I think it does, and hampers his operations very prejudicially.

12409. Is it your opinion, speaking on behalf of the great body, in fact the whole body of the owners and managers, that they would throw up the working of their mines, if legislation were to proceed beyond that point?—It would be saying a great deal to say that they would throw up the working of their mines, but they would make a great fight in the Legislature before they consented to any such measure being passed.

12410. After all, mining is a very dangerous operation, is it not?—No doubt.

12411. Attended with considerable risk and vast responsibility?—Yes.

12412. If the responsibility is shifted, and at the same time the owner is left with the risk, I want to know whether you could carry on mining operations at all?—The tendency would be to begin to throw out certain mines where the risk was greater than the advantage, and the result would be to so far interfere with mining operations in this country as to very seriously operate upon the price of mining property, and to raise the price of coals to the public.

12413. If a coal owner neglects a suggestion made to him by the inspector, the inspector has the choice of forcing him to arbitration in the first instance, and there is a liability to the penalties attending an infraction of the Act after that; is not that so?—Yes.

12414. So that it is impossible under the present legislation for a coal owner to avoid following the suggestions of the inspector, provided he proceeds to arbitration?—No doubt; he cannot evade the obligations and the responsibility that attach to him; he must go to arbitration, or the inspector may give him notice, "If you do not adopt these suggestions, I shall hold you responsible for any accident;" and that is a moral responsibility which the coal owner shrinks from much more than any penal enactment.

12415. Supposing that arbitration be forced upon you, you are bound by the Act to choose a certain number of men in whom you have almost as much confidence as in yourself?—Yes; that was the reason why the Act said that they were to be chosen from among a class of coal owners, in order that the coal owner should not be able to say that he had not confidence in the arbitrators.

12416. In the event of the suggestions of the inspector being approved by those persons, you would feel that "in the multitude of counsellors there is wisdom," and that your own judgment was overborne, I suppose?—No doubt, in my own case I should.

12417. And in that case you would accept any suggestion which had been made?—In that case I should accept it cheerfully.

Mr. William Aubone Potter, called in; and Examined.

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12418. Mr. *Liddell.*] You are Mining Engineer to Old Silkstone, Mount Osborne, and other collieries in Yorkshire, are you not?—I am.

12419. Have you heard Mr. Mathews's evidence?—I have.

12420. And do you concur in the general tenor and scope of that evidence?—I do.

12421. In your collieries are the coals all weighed at the pit's mouth?—Yes.

12422. And the workmen have the right of appointing a check weighman on the pit's bank, have they not?—They have. I may mention that at one colliery the men have no check weigher. At the Silkstone Colliery they have no check weigher, and they have never had one there. At other collieries they have one.

12423. Have you any complaint to make of the present system of weighing?—No, we rather prefer the check weigher than otherwise, provided he simply takes a record of the weight. So long as he does not interfere with the owner's weigher, there is no objection to his being there on our part.

12424. Have you ever had any disputes between your own weigher and the men at Silkstone, where you say they have no check weigher?—None whatever.

12425. Are the machines subject to any inspection?—The men have the opportunity of testing them at any time they think proper in other than the hours during which they work.

12426. Have they ever taken steps to test the accuracy of the machines?—In some cases they have.

12427. With your sanction?—Certainly.

12428. Then I do not understand that you would have any objection to their being periodically examined by an authorised person?—None whatever.

12429. How often do you pay your workmen?—Weekly.

12430. How long have you adopted that system?—Only five months.

12431. Then you are in a good position for comparing the advantages of the two systems, of which we have heard so much, the fortnightly system

system and the weekly system. May I ask what induced you to adopt the weekly system of payment?—It was the request of the men that we should pay them weekly; they thought that they would have a better opportunity of settling their accounts with their tradespeople, if they had their wages weekly.

12432. Did you at once accede to that request?—Not immediately. Our fear, in the first place, was caused by the fact that the Monday following the pay day usually has been a play day.

12433. The pay day being what day?—The pay day being Saturday. Many of the men stayed away on the Monday, and as the pit had to be worked on that day, the general charges became more costly when there was an insufficiency of labour, that is to say, we did not get the due quantity of coal to set against the general expenses of the mine, and we feared that if we paid them weekly that would happen every Monday, in place of happening once a fortnight, as it did when we paid them fortnightly.

12434. Have you found that that has been the result?—It is so with some men. I certainly apprehended that we should have had more difficulty in getting the pit full on Monday than we have experienced; and there are some men in whose case that difficulty would occur more frequently than in the case of others, but as a rule I see no objection to the weekly pay.

12435. Are those men who appear disposed to take a holiday once a week, men that you care very much about keeping, or are they rather an indifferent class of workmen, and do your better workmen come regularly on the Monday?—As a rule they are indifferent workmen. There are some good workmen who forget themselves occasionally, but as a rule it is the indifferent ones who stay away much.

12436. Men whose places you could supply, perhaps, tolerably easily, and even, perhaps, by better men?—We could. I may mention that the most serious disadvantage of the weekly pays is the trouble, and the additional labour, that is required in measuring the work performed in the pit, and in recording it in the office. For that purpose additional clerks are needed in the office, and the deputies, and other men, have to be taken from their business of looking after the safety of the men, to measure off the work and attending to the weekly settlement.

12437. How have you got over those difficulties to which you have just alluded; have you been obliged to increase your staff in consequence of the system of weekly payments?—In some cases we have.

12438. At, of course, an increased expense?—At an increased cost.

12439. But in your opinion do the advantages which result from having arrived at a settlement with your workmen make up for any additional expense to which you have been put by an increased staff?—I do not think it has ever been made up to us; that is to say, we have not got such an increased quantity of coal from the same number of men since we adopted the weekly pays as to compensate for the additional cost and trouble which we are put to in taking the work weekly in place of fortnightly.

12440. Mr. *Woods.*] Have you got the same quantity of coal under the weekly system?—I think the quantity is pretty much the same as it was.

12441. Mr. *Liddell.*] You a little misapprehended, I think, the drift of my last question; I will put it more plainly. Was the advantage of arriving at an amicable settlement with your workmen upon this question, in your opinion, so important as to make up, as it were, to you for the increased cost attendant upon the increase of your staff. In other words, might you not have been forced into settling this question by a lengthened strike, and did you not apprehend that that might have occurred?—It seemed very probable.

12442. And therefore rather than that should happen, you preferred to make the sacrifice of which you have spoken?—Quite so. I should mention that when the request was made for the weekly payments, it was also accompanied with a request for an additional rate of prices; the two demands were made at the same time.

12443. May we consider, then, your agreeing to the weekly payment in the light of a compromise, or did you increase the wages also?—We increased the wages five per cent., and gave them weekly pays too.

12444. You acceded to both the requests?—We acceded to both the requests.

12445. What is the whole number of men in your employment?—Somewhere from 800 to 1,000, altogether.

12446. Were you given to understand that the consequences of refusing these requests might have been serious?—We quite anticipated a strike if we had stood out upon the five per cent. and the weekly pays.

12447. Mr. *Woods.*] Will you extend your answer to Mr. Liddell's question, and say whether you apprehended the strike for the weekly payments or for the rise of wages?—The two requests came together; I think that the five per cent. would have been the prominent reason for the strike, if there had been one; but the other would have accompanied it.

12448. If the men wish for the weekly payments, is it your opinion that they can obtain them from their masters by asking for them?—In many cases the weekly payment has been conceded to them in the district, for it was made a general point.

12449. But generally, if colliers wished it, they could obtain it, could they not?—They have done so in some cases; the great objection to giving the weekly pays was the increased labour and trouble required in measuring off the work every week in place of once a fortnight.

12450. But supposing the men made a great point of that; could they not obtain it?—I think they could.

12451. Mr. *Liddell.*] Have you prepared any statement showing the rate of wages paid at the present time, and at former periods?—I have a statement of the wages paid at one of these collieries, the larger of them; I may mention, perhaps, the object of preparing this statement; I observed in the evidence which the Committee have had from John Normansell, that he stated that there had been no general advance since 1858, with the exception of the five per cent., which was given lately, and to which I have just alluded, and I have prepared this statement to show that there was a general advance given

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given in 1860, and the Committee can see the several advances which there have been.

12452. What was the nature of the advance in 1860?—In 1860 there was an advance equal to about nine per cent., and then in addition to that there was the five per cent. given afterwards.

12453. We will deal with the first advance of nine per cent.; was that in consequence of representations on the part of the men?—It was; there was a request by the men for an advance, and it was ultimately given.

12454. Were there any peculiar circumstances attending the trade at that time which appeared to justify so large a demand; or perhaps you would explain the circumstances under which that demand for nine per cent. was made?—Without referring particularly to that time, I may say generally that the coal has risen in price, and that the demand for increased wages has gone on pretty much with it; I do not wish to make the point that the men through their union have forced these advances upon us; I should rather not make that a point, because I think that the increased price of the coal generally warranted these advances, as they were given from time to time.

12455. Do I rightly understand that in 1860 the full demand was acceded to when the nine per cent. was given?—I scarcely think it was so; I really forget precisely the circumstances, but nine per cent. was given at the colliery about which I have prepared this statement. At another colliery, the Silkstone Colliery, I find that the advance was five per cent.

12456. *Chairman.*] When you speak of nine per cent., do you mean that there was nine per cent. advanced upon each corf?—It amounts to about nine per cent. upon the rate of wages paid. I have calculated the difference of the price paid at the one period and the price paid at the other period, and that is the result.

12457. Mr. *Woods.*] Nine per cent. in the earnings, you mean?—Not in the earnings, but in the rate of wages. For instance, in 1854 we paid them for one class of work 3 *s.* 8 *d.*, whereas in 1860 we paid them 4 *s.*, and taking the ratio between 3 *s.* 8 *d.* and 4 *s.*, it amounts roughly to nine per cent.

12458. *Chairman.*] You arrive at that nine per cent. upon the general tariff?—Yes.

12459. The tariff of everything, or only of some parts?—Of the coals worked.

12460. Mr. *Liddell.*] But does that apply to all the classes of men employed, hewers, drawers, and so forth?—No, only to the hewers.

12461. Then the rise of wages only affected the piecework men, not the day labourers?—Not the day labourers.

12462. Mr. *Woods.*] Did it affect all the piecework?—All the piecework.

12463. Is there any yardage system in your district?—Yes, you have there the yardage prices as well as the other prices.

12464. Were they advanced also?—They were also advanced.

12465. *Chairman.*] Where is that statement of Mr. Normansell's, to which you have referred?—At Question 3155.

12466. The question to which you allude was this: "Has there been any increase in the rate of wages on the South Yorkshire coal field since 1858?" to which Mr. Normansell replied, "I do not know that we have had any general advance until latterly, within these last few months"?—Yes.

12467. Mr. *Clive.*] That only applies to one colliery, does it not?—At the Silkstone there was a rise of five per cent. within a recent time.

12468. At other collieries, does that table of yours apply to which you have just referred?—That statement applies particularly to one, but I believe it would be found that the rise was pretty general throughout the large collieries.

12469. Mr. *Liddell.*] Can you speak positively to that?—No.

12470. Because it is quite clear that Normansell's evidence applied to the district?—Just so; I believe that to be the case, although I can only speak to the fact in respect to these two collieries.

12471. General *Dunne.*] What is the name of the colliery to which you specially allude?—Mount Osborne.

12472. *Chairman.*] It applies to your colliery, the Mount Osborne, and, in a less degree, to the Silkstone?—Yes.

12473. Mr. *Liddell.*] You wish, I believe, to make some statement in regard to an answer of Mr. Normansell's to Question 3364, in which he said, "We have one colliery where the want of sufficient furnace power has been frequently complained of." You wish, I believe, to make a statement upon that, as a matter of fact?—What I wish to explain to the Committee is, the position of this particular pit belonging to Mr. William Day, to which allusion has been made by Normansell in his evidence.

12474. Perhaps you could state the quantity of air that passes through that pit?—Yes; but perhaps I may first explain the circumstances of that colliery. The Mount Osborne colliery has a royalty of about 640 acres, and there are six shafts sunk to the coal in that 640 acres. These six shafts all communicate with each other at the pit bottom. At the time that Normansell gave his evidence we had two upcast shafts for this colliery, and at that time arrangements were going on for further developing the upcast power. There was a communication made by some one to Mr. Morton with respect to the condition of the pit, and he came over, went down the pit, and through the workings with me, and approved of the whole arrangement.

12475. Mr. *Woods.*] Is Mr. Morton the inspector?—He is the inspector. I only wish to explain the fact to the Committee, because, if that statement went forward without my explanation, it might be detrimental to the coal owner whom I represent, and it might be supposed that his pit was not in a fit state to work in. I may state that, taking the average during the past 12 months, we had no less than 92,345 cubic feet of air passing per minute in the mine, so that, as the Committee will see from those figures, the amount of air in the colliery is considerable.

12476. Mr. *Liddell.*] Then I understand you to say that Normansell was in error when he stated that you had only one upcast and two downcast shafts?—That is so.

12477. *Chairman.*] In answer to what question did he state that?—Questions 3376 and 3377.

12478. You said just now that there were four downcast and two upcast shafts in the colliery?—Yes.

12479. Therefore, Normansell's answer to Question

Question 3376 is true, when he says that "there is one upcast to two downcast shafts"?—There were were two upcasts and four downcasts at the time.

12480. Is it not stated by him that there was "one upcast to two downcasts"?—Yes.

12481. Then follows an explanation, which is an incorrect explanation, the witness no doubt not fully understanding the question; but it is true that at that time the proportion of upcasts to downcasts was one to two?—It is quite true; but I may explain that with regard to the upcast shafts, they are shafts entirely for the air coming from the mine; there is nothing in them; they are quite clear.

12482. Mr. *Woods.*] By "nothing" you mean no machinery?—No machinery; they are clear shafts; that is to say, the whole area of the shafts is clear; in the case of the downcast shafts, they are for the most part either used for drawing coal, or used for pumping water; so that it will be seen that the whole area of the downcast shafts, taking shaft for shaft, is inconsiderable; that is to say, the area of one upcast would be equal to two downcasts; in consequence of the cages passing up and down the pit, the area of the downcast shaft is diminished.

12483. Is it, in your opinion, in the upcast and downcast shafts that the danger of explosion chiefly arises, or is it in the detailed conduct of the air over the mine?—In the detailed conduct of the air over the mine.

12484. Mr. *Liddell.*] Is that all that you have to say upon this question of the shafts. Have you given your full explanation?—I have given my full explanation. I merely wished to show that this was one colliery, having six shafts in it, that they being all connected below it was simply one colliery, and that the area was 640 acres.

12485. In reference to the question of ventilation, I may put a general question to you. Are the accidents in mines, in your opinion, generally caused by a want of skill in the agents, overmen, and chief managers of the mines, or from a lack of diligence and want of care on the part of the persons employed?—Accidents in a great measure arise from carelessness on the part of the workmen. In our district we have had some severe explosions, which, no doubt, are attributable to the use of the naked light where the safety lamp would be more safe. In recent years explosions have been less frequent, and the majority of deaths in the Barnsley, South Yorkshire district, have occurred from falls of the roof of the mine.

12486. As a matter of fact, would it be practicable, even in these dangerous mines, these deep mines, where there is a great prevalence of fire damp, to pour through the workings such an amount of air as would render it safe to dispense with the use of the Davy lamp altogether?—I fear not, for this reason. Supposing a mine under ordinary circumstances to give off a certain quantity of gas, you could make a calculation then to admit as much oxygen into that as would render it harmless; but if an irruption of gas came on suddenly, you would not have enough air to neutralise it, and, if naked lights were used, there might be an explosion.

12487. Under the most perfect and complete ventilation that the skill of man could invent, it would never be safe in these fiery mines to work with naked lamps?—Just so. I think it never would be safe to dispense with the use of the safety lamp.

12488. Do you think that the more perfect ventilation of these fiery mines does in some degree tend to render the workmen less sensible of the danger in which they are living?—I think it is possible that that may be so.

12489. I mean this. Where the ventilation is extremely perfect, and it only occasionally occurs by accident that the escape of gas is such as to render the place dangerous, does not that fact in itself, perhaps, tend to make the workmen forget the danger which may exist?—I think that under those circumstances the liability would be to become more careless in such a mine than where they apprehended danger.

12490. Because the mere uncovering of the lamp, if there is a certain amount of this gas present, is sufficient at any time to produce an explosion, is it not?—Clearly so.

12491. Mr. *Clive.*] With respect to fiery mines, does the objection to the safety lamp arise from the coal owner or the overlooker, or does it arise from the men generally?—Generally from the men; where I introduced the safety lamp in the Silkstone mine, the men had positively requested me on several occasions to remove the safety lamp, because they thought it was not required by the state of the mine, and of course they would be able to see better with candles.

12492. It is always more convenient to the men to work with candles where they can do so with anything like safety?—Yes.

12493. Did you ever hear of Mr. Kenyon Blackwell?—Yes.

12494. Do you know that he was Government Inspector?—Yes.

12495. Do you know that he had the management of a good many mines?—Yes.

12496. Did you ever see a report of his in which he said, that in fiery mines no candle should be allowed at all?—I have not seen the report.

12497. Are you aware that he did advocate that view?—I am aware he did.

12498. Would the objection to such a view as that come from the owner or from the men, do you think?—It would come from the men, I think; they all object to the lamp on account of its giving so little light; I have found no difficulty in putting the lamp into the collieries that I have to do with, where I thought it was desirable that it should be used.

12499. Do you forbid the use of candles in those cases at all times?—Certainly; I may mention that in nearly all mines where the safety lamp is used exclusively in the workings, that is to say, in the interior recesses of the mines, it is usual to have naked lights at the pit bottom where the coals are hung on, and also upon the inclined planes for conveying the coal to the pit bottom; the places where the lamp is used are in the interior workings of the mine, at points to which the air becomes more or less impregnated with gas.

12500. Are you aware that Mr. Morton has recently been down the Mount Osborne Colliery?—Yes, I was with him.

12501. How long was that ago?—I cannot fix the date now.

12502. Is it since Mr. Normansell gave his evidence?—Yes.

12503. Mr. Normansell gave his evidence on the

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the 23d and the 25th of April, and it is since that, you say?—It is since that, I think.

12504. Did you and Mr. Morton inspect the places that Normansell referred to?—We did; at least, I am not aware that Normansell referred to any particular places, but I took Mr. Morton to the places where gas was to be found in the pit.

12505.—The places which were open to work?—Yes.

12506. What instructions did he give?—He asked me particularly what we intended to do, and I told him that we had stopped the places where this gas was until the arrangements were carried out at the other pit for having an additional upcast. I explained to him all the arrangements that are contemplated, and he perfectly coincided in what I said.

12507. Was it your own doing, or was it by his suggestion that you stopped those places?—It was my own suggestion to Mr. Morton.

12508. You had done that before he had got into the pit?—The work was going on at the time.

12509. Did you give those instructions in consequence of Normansell's evidence?—No, certainly not.

12510. How was your attention drawn to those places?—Because the places had been stopped before Mr. Morton came, on account of this gas.

12511. Were they stopped before Normansell gave his evidence?—I am not aware whether that was so or not.

12512. You cannot recollect when you gave the instructions?—No; but I may say this distinctly, that Normansell's evidence had no practical effect upon the stopping of the places, supposing that evidence even to have been given before.

12513. Can you tell how long before Mr. Morton's visit it was that you had given orders for the stopping of those places?—A week or 10 days before his visit we had stopped several of the places. When Mr. Morton came there were some places still at work, which I took him to; but in some of them the bank work was stopped before he came, because I found there that the gas was coming off so strong that it would not be safe any longer to continue working those places until we got the air into that part of the mine.

12514. Was it in May, do you think, that Mr. Morton came; will you refer to your memorandum book?—Mr. Morton, I find, was at the Old Mill pit on the 26th of April.

12515. And 10 days before that you say you had given the instructions?—I cannot be sure exactly about the date, but the places had been stopped a short time before his visit.

12516. Then, in fact, they had been stopped before Normansell gave his evidence, which he did on the 23d and the 26th of April?—They had, I think.

12517. *Chairman.*] Perhaps there were two visits of Mr. Morton's?—Mr. Morton made another visit on the 8th of May, but at that time he did not go down the pit.

12518. Mr. *Woods.*] Do you know the proportions between atmospheric air and inflammable gas at which it first begins to be explosive; what is the smallest quantum of fire-gas which will render it explosive?—I think that about five of oxygen to one of carburetted hydrogen would be explosive; I believe that practically eight of oxygen to one of carburetted hydrogen is the highest explosive point.

12519. Can you say precisely where the explosiveness begins?—I scarcely know that, I have not tested it; and it would be very difficult in a mine to ascertain the exact quantity.

12520. Are the whole of the wages of a collier at your pits reckoned by the weight of the coal?—By the weight, and also the yard measure in straight work.

12521. Can you give the proportionate amount paid at your colliery on each of those two modes?—I cannot.

12522. You can, perhaps, give an approximation of the proportionate amount of the one to the other?—I should say, roughly, about one-third of straight work and two-thirds of bank work.

12523. One-third by a system of yardage, and two-thirds by a system of weight?—Yes.

12524. Then if Parliament imposes any legislative enactment requiring you to pay your colliers' wages by weight, it will not be applicable to your pits?—No, certainly not; not to the pits I have to do with.

12525. *Chairman.*] Am I to understand you to be quite clear that you had given directions for the stopping of the places complained of, before Mr. Morton came down the pit?—As to the precise dates I scarcely recollect; but my instructions to my under-viewer were, that any places that were found to contain gas to a certain extent should be stopped.

12526. Those were general instructions, were they not?—General instructions.

12527. But not instructions given specially, with reference to the then state of the pit?—At this particular place it was so. I may mention to the Committee that there was a large throw which separated the part where this gas was given off from the rest of the pit, and this coal was what we term maiden coal, that is to say, it had not been worked, and consequently contained more gas than coal, which had been ventilated by means of the workings in it. We had not many men working on this side of the throw, but we were pushing places as exploring places, as we call them, into the coal, for the purpose of working, and there were a few banks (I think about four, if I recollect right) which had been started, and in these four banks this gas was collected. It came from the end of some levels out of which these banks were worked, and so came down round the face of the banks where the men were working, and it was there that we decided to stop the working. We were still working, as I explained, when Mr. Morton came, but we were driving another air road, so as to reverse the air, the effect of which would be to take the air fresh upon the men working this bank first, and then to bring it back upon another level.

12528. You have also been making another upcast shaft, have you not?—We have not been making another upcast shaft, but since we were making the passage into the new colliery, we have got the use of the second shaft, of which I spoke, and we are converting one of the shafts where we draw coals into an upcast, and we have put a furnace at the bottom of that pit.

12529. In fact, you have recently increased your furnace power?—We have.

12530. Then it was not incorrect to say, that the

the furnace power was insufficient two months ago?—The air was not so good as we could have wished it, and the air was not sufficient to ventilate those places where the gas came off from the maiden coal.

12531. Therefore, you have recently increased the air ways below ground, and also converted a downcast into an upcast shaft?—We have.

12532. Mr. *Woods.*] But those operations would of course require a long time to design them and to complete them?—Quite so.

12533. Are they part of a system extending over a lengthened period?—This is one of the oldest pits in connection with this mine, I may mention; and it was originally used as an upcast shaft, so that that flue was already prepared, and the furnace arch was turned, and that enabled us to proceed much more rapidly with the alterations than if we had had all this arching and drifting to do anew.

12534. Do you think the mine was in a dangerous state before you made these alterations?—By no means in a dangerous state.

12535. Mr. *Liddell.*] Do I rightly understand that this improved ventilation and these increased appliances were rendered necessary by the fact of your proceeding to work a new face of coal altogether?—Quite so; it was in discussion for some time previously whether we should have a new shaft altogether, but in consideration of its being an old colliery, we did not see that there was sufficient coal to warrant that, and therefore we adopted the other plan.

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12536. We may understand you to say that what you call a maiden field throws out a vastly greater proportion of gas than the same amount of coal would do that has been already tapped?—That is so.

12537. *Chairman.*] And Mr. Morton has never called your attention to the want of any further ventilation, as I understand you?—Never, and I never heard a complaint from the men with respect to that; but my eyes were fully open to the fact of the gas being in the place, and I was paying attention to it. In this particular place we had not sufficient air to dilute the gas, and therefore we caused it to be stopped until we got these other operations completed.

12538. Mr. *Liddell.*] Is the operation of tapping a new coal field always, to a certain degree, a dangerous one; is it the case that the operation must be conducted with very great caution?—It must.

12539. And the presence, I presume, of a well skilled experienced man to superintend such operations, is absolutely necessary?—It is.

Mr. Philip Cooper, called in; and Examined.

12540. Mr. *Liddell.*] You are Manager and Mining Engineer to the Rotherham, Masbro', and Holmes Coal Company, are you not?—Yes.

12541. You have been engaged for 27 years in the coal trade, I believe?—Yes.

12542. And you employ about 500 persons?—Yes.

12543. Your colliery has been alluded to in evidence already given before this Committee, and I believe you have some statement in correction of the evidence given to us, which you wish to lay before the Committee?—Yes, I have.

12544. I will refer you to Question 3217; will you explain your case of dispute with the men as to the weighing, which is there referred to, in the answer to that question?—The answer to that question, as the Committee are already aware, states that the machine was wrong to the extent of 1 cwt. in 10 cwt., or one-tenth.

12545. Is that a correct representation?—It is not.

12546. I believe the machine was examined?—The machine was examined by the inspector of weights and measures for the district, Mr. Gillett.

12547. And to what extent was it found to be incorrect?—I was present when it was tried, and it was found to be wrong 6 lbs. in weighing 15 cwt.

12548. The statement having been 1 cwt. in 10?—Yes.

12549. Have you any explanation to give as to the inaccuracy of the machine; was it not traced to a particular cause?—The machine itself was perfectly correct.

12550. But was it not affected in some way by the vibration caused by the engine?—To some limited extent; but on the day on which it was examined, it was found that there was a little friction in the table rubbing against a part of the surrounding fixture in which it works; the effect of that was, that we weighed both the friction and the coal, and consequently we paid for the full amount of that resistance, in addition to the weight.

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12551. It told against you, then?—Against the colliery owners, certainly.

12552. Have you remedied that defect in the machine?—It was remedied on the spot in a few minutes; I may, perhaps, show this written statement by the inspector; it is his certificate on the question (*handing it in*).

12553. I understand you to say that the machine was inspected; will you state the result?—It was inspected, as I say, by Mr. Gillett, who was the inspector of weights for the district, and also the superintendent of police for Rotherham, and he says in this certificate, "In compliance with the request of Mr. Cooper, the manager, I examined the machine on the 20th of January last, and found it 6 lbs. against the men at 15 cwt."

12554. Do you agree in the evidence that you have heard given to-day, as to the material points of it, for instance, as to the value of weighing *versus* measuring?—I might say that we weigh every corf, and the prices that are paid on the quantity of coal are paid by weight.

12555. And do you approve of the system of weighing in preference to that of measuring?—Yes, we have good reason to do so; it has been in use about three years, I think; before that we found that instead of getting 10 cwt. in in a corf, as per agreement, we got 8½ cwt. by measure, and therefore I enforced the weight, very much against the wishes of the men.

12556. Therefore I understand you to say that it is decidedly for the interest of the master to have the coal weighed, and that when you introduced the system it was opposed by the men?—They had a very strong objection to it and we enforced it.

Mr. *P. Cooper.*
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12557. Have they become reconciled to it now?—We have had no complaint whatever since we began the weighing, until about the end of last year or the beginning of this.

12558. We have been told that the system of measurement is against the interests of the men; I now gather from you that the system of weighing is greatly in favour of the master, and therefore I should like to ask your opinion, as a practical man, as to which system you really recommend?—There are evils in both cases, but I prefer the weighing, decidedly, as the most satisfactory.

12559. To both parties?—To both parties.

12560. Although your men opposed it?—Yes; I should prefer the weighing, independently of the opinion of the colliers.

12561. Have your workmen a check weighman on the bank?—Yes, they have; the objection to measuring coal, so far as I have seen it, is this, that the men can, and do really try to fill their corves hollow, that is to say, to pile the large coal in such a way that it is hollow, and consequently the corf might be quite full, and yet only contain 70 or 80 per cent. of what it was agreed to hold; now we find that the average is 10 cwt. a corf, whereas before we began weighing it was not more than 8½ cwt., and I calculated that that was a loss on 50 scores per day of 20,000 tons a year.

12562. Mr. *Woods.*] Will you give the figures by which you arrived at that result?—Fifty scores of corves make 525 tons, taking them at 10 cwt., the agreed weight; and the 50 scores at 8½ cwt., make 446¼ tons, or a loss per day of 78¾ tons, which at five days per week is a loss of 20,475 tons per year, which we suffered.

12563. On how many thousand tons of output is that?—I have calculated that; it is 120,000 to 140,000 tons a year; the average of the corves was 8½ cwt. by measure; the actual weight was 10 cwt. agreed to, and 10 cwt. we pay for now, and 10 cwt. they actually are averaged one with another and paid for.

12564. Then do you say that the loss was a sixth of the whole?—Yes, the average loss was rather less than a sixth.

12565. General *Dunne.*] As I gather from your evidence, it is correct to say that there was a mistake in the machine, and it is only the question of the amount?—Yes; I have not the slightest doubt whatever that the machine was 6 lbs. wrong against the men, but it is a difference between 4 lbs. in 10 cwt. and 112 lbs. in 10 cwt.; there was some statement in connection with that evidence which was given before this Committee as to the difficulty of taring the empty corves, upon which I should like to make a remark.

12566. Mr. *Liddell.*] Is there much difficulty in that?—I think not in our case. In our case the corves are entirely made of iron, and are all exactly one size, and there is not any very large difference in the weight of those; therefore, we take the average weight of the whole number of corves for the tare.

12567. That average weight being what?—That average weight being at the present time 5 cwt. 2 qrs. 1 lb.

12568. Each corf weighing that?—The average of the whole) they are made of iron and they carry from 10 to 15 cwt. of coal.

12569. Mr. *Woods.*] Do you never repair them?—Yes.

12570. Are they always the same weight?—No, they are not always the same weight. Out of 499 that were actually weighed, there are 452 which are 5 cwt. 1 qr., 5 cwt. 2 qrs. or 5 cwt. 3 qrs., so that the large proportion of them are the same weight within a quarter of a cwt.

12571. *Chairman.*] I understand you to say that although the machine was very nearly right, yet it did not work properly on account of the friction?—In some cases I have no doubt it did not.

12572. But that the error was rather in favour of the men?—Decidedly.

12573. Where was that friction; what was the form of your machine?—The form of the machine was something like this table, it worked within a permanently fixed frame, and the friction was between the moving table on which the weight was placed, and the fixed and permanent frame.

12574. That is to say that on account of that friction it would require more weight to bring the table down to a particular point, would it not?—No. When I stepped on to the table it sent it down easily, and when you put a corf on containing 10 or 15 cwt. of coal, and weighing five cwt. itself, the table went down, and then the difficulty was to bring it back, and you had to overcome the difficulty from the friction as well as the actual weight, so that you weighed the resistance as well as the actual coal, and the men got the benefit to whatever extent that resistance went.

12575. The measure was taken on the coming up?—Of course a travelling weight in all cases carries down the table, but when the table came up horizontally, and reached the point where the weight was to be read, the table was free; it was only when it was below that point that it rubbed.

12576. But it was in favour of the men, you say?—Yes. I have no doubt that in all cases where the machine works stiffly, it is in favour of increasing the weight.

12577. You mean that it requires a greater amount of weight to make the same reading?—Yes, wherever there is a stiffness in a lever machine, it always increases the weight of the article weighed.

12578. Where there is a lever machine, and the friction prevents its working, the less weight produces the same reading?—A given weight produces more reading than its actual weight. I might say in reference to that, that that machine was examined every day, and that it could not have been wrong more than the day on which it was detected. It had frequently been examined by the men in my presence, and pronounced by them to be perfectly right before the examination made by Mr. Gillett.

12579. Mr. *Woods.*] Do you compute any portion of the wages of the colliers at your collieries by a system of yardage?—Yes.

12580. Can you state the proportionate amount by each system?—I think I could not state that generally, but I can say that in certain strait work with us the yardage amounts to something like 60 per cent. of the wages, while in other cases it does not amount to more than 10 per cent.

12581. Then it is not correct to say that the wages, speaking as of the whole wages, are paid by weight in South Yorkshire?—Certainly not, because, in addition to the yardage for cutting, there

there is the yardage for packing to support the roof, which is not paid by the ton generally.

12582. Then no legislative enactment which says that the wages of the men shall be computed only by a system of weighing will be applicable entirely to your district?—By no means. We pay one-third of the wages paid on the colliery as wages for daily labour, besides the colliers' work, or at least a third of the persons employed.

12583. Above ground and below ground?—Yes.

Mr. *P. Cooper.* 2 July 1866.

Mr. JOHN PLATTS, called in; and Examined.

12584. Mr. *Liddell.*] You are Manager of the Wharncliffe Silkstone Colliery in Yorkshire, are you not?—Yes.

12585. You have been engaged nearly 40 years in mining, and employ about 660 people, I believe?—Yes.

12586. I believe you wish to explain the facts of certain cases that have been alluded to in Mr. Normansell's evidence. I will first refer you to Question 3175, and ask you the reason why you objected to employ Normansell in what he described as No. 2 pit?—We had already a weighman of the name of Walker appointed by the men.

12587. Had he been there for some time?—Very near two years.

12588. And it was because they had already a weighman that you objected to Normansell being there himself; is that so?—Yes.

12589. Did he take out a summons against you?—Yes.

12590. What followed?—I had to appear before the bench of magistrates at Barnsley.

12591. And what was the decision of the bench?—The decision was given against me. We objected to his being a weighman at No. 2, because the Act specifies that the weighman must be one employed in the mine; and I received instructions from the company to object to his being placed there as weighman so long as they already had one.

12592. Had he been discharged from that colliery?—No; but the pit No. 1, where Normansell was accustomed to weigh, and where he had been appointed by the men, was closed.

12593. Can you say upon what ground the case was decided against you by the magistrates?—I cannot say positively on what ground they thought that he was legally appointed as weighman.

12594. Did they hold that at the time he was actually employed in the pit?—Yes.

12595. Although you say the pit was closed?—Yes; they thought that the two pits were one pit.

12596. Have you a letter which states the result of the proceedings on that matter before the Queen's Bench?—Yes (*handing it to the Chairman*).

12597. Normansell was ejected, I think, from the weigh house?—Yes; I told him that he could not be allowed there without the sanction of the owners.

12598. He was ejected three times, I think?—Yes.

12599. On the ground that there was already a person engaged in that capacity?—Yes.

12600. There is a statement in Mr. Normansell's evidence to the effect that the workmen produced in 12 months no less than 14,000 tons over and above the given quantity which the corves were supposed to contain; have you any remark to make upon that statement?—I do not know how he arrives at that result; previous to that time we paid by measure, and that was in 1858; I took out 42 weeks from 13th July 1858, to 4th May 1859, and I found that the total quantity drawn during that time was 70,418 tons; we took the corves at $5\frac{1}{2}$ cwt. each, that is when paid by measure. If I take the first six weeks after we began to pay by weight, I find that in those corves, instead of $5\frac{1}{2}$ cwt., the men were induced to send out $5\frac{3}{4}$; they send out a quarter of a hundredweight more by weight than they did by measure; but where Normansell arrived at his 14,000 tons a year I cannot see.

Mr. *J. Platt.*

12601. There is a gain by the masters by the adoption of the weighing system, as I understand you?—Yes, a quarter of a hundredweight per corf more sent up; and supposing we take it for 12 months, it amounts to 3,162 tons on the total quantity drawn for 12 months; when a man is sending out by measure, it is his interest to load his corf as light as he possibly can; when he is sending out by weight it is just the contrary; he then loads his corf as much as he possibly can, because it is his interest to do so.

12602. Can you state the quantity of coals worked, and the actual amount of the deductions made?—I can give it for 42 weeks previous to the weighing. I take from July 13th 1858, to May 4th 1859. The total quantity laid out, it appears, is 1,060 tons, and the total drawn 70,418 tons; that is about one ton and a-half laid out for every hundred tons drawn.

12603. Mr. *Woods.*] Are the answers as to payments by weight and yardage which were given by the last witness applicable to your colliery?—Yes.

12604. *Chairman.*] I understand you to say that although the change of system from the measuring to the weighing did lead to the corves being better filled, Mr. Normansell has overstated the difference?—Yes.

12605. You know, I presume, that Mr. Normansell did not make any charge of fraud, or of the men having been cheated, but he only said that they were induced to put more coal, and they got better paid, and there was less forfeiture under the weighing system, though you think that the 14,000 tons is an over estimate?—Yes; and the 80 corves per day is an over estimate.

12606. Mr. *Liddell.*] Normansell says, "I have seen as many as 80 corves or tubs forfeited in one day for short weight; that would be about 20 tons at that pit;" is that a correct representation of the case?—No; there were not any forfeitures of 80 corves in one day. The average forfeitures were only to the extent of one ton and a-half for every hundred tons drawn.

12607. Mr. *Woods.*] Supposing that a tub is sent up dirty, how do you treat that at your colliery?—It is forfeited now.

12608. Is the whole tub forfeited?—Occasionally.

12609. *Chairman.*] But you do not forfeit for under weight?—No.

12610. Mr. *Woods.*] If a tub is sent up charged with too much slack, is that forfeited?—Yes.

Thursday, 5th July 1866.

MEMBERS PRESENT:

Mr. Ayrton.	Mr. Kinnaird.
General Dunne.	Mr. Liddell.
Sir Philip Egerton.	Mr. Neate.
Mr. Fawcett.	Mr. Hussey Vivian.
Mr. Wm. Orme Foster.	Mr. Woods.

CHARLES NEATE, Esq., IN THE CHAIR.

Mr. JOHN WARD, called in; and Examined.

Mr. *J. Ward.* 5 July 1866.

12611. Mr. *Liddell.*] WHAT are you?—I am the Managing Partner of the Wingerworth Collieries, near Chesterfield, in Derbyshire.

12612. Have you more than one colliery under your management?—We have three collieries.

12613. And you employ how many hands?—From 300 to 400.

12614. I believe you wish to give evidence chiefly in reference to certain evidence, which has been already given to this Committee by Mr. Samuel Cartlidge?—Yes.

12615. He represented himself to the Committee as a working collier, in North Derbyshire, in the Claycross Colliery district?—Yes.

12616. Are you acquainted with Samuel Cartlidge?—Yes, I know him.

12617. Was he in your employment?—Yes.

12618. How long?—A little less than nine weeks.

12619. When was that?—He left on the 23d of April, having come on the 21st of February last.

12620. Why did he leave?—He had neglected his stall, and came and asked for an allowance; and, as his contract was to keep his stall in proper order, I refused to make him any allowance; but I gave him the option of leaving, if he thought well, without notice, and he left accordingly.

12621. He broke his contract, in the first instance, as I understand you?—Yes.

12622. But he left of his own will; he was not discharged?—He was not discharged.

12623. Will you refer the Committee to those parts of his evidence which you wish to correct?—In answer to Question 4045, "How many of these are men?" he says, "I should suppose about 140." And he says that 60 are boys; now we have only 46 boys, I believe, working in the pits at all the three collieries, and he was alluding only to the colliery where he worked, when he said 60. We have only 37 boys under 20 years of age at that colliery. Boys, from 10 to 16 years of age, are mentioned in the next question, and we have only 30, under 16 years of age, at all the three collieries.

12624 He then goes on to state, that he thinks that possibly there are 20 boys under the age of 12, at that colliery?—Yes, that means the colliery where he was working; the fact being, that there is not one single boy under 12.

12625. *Chairman.*] Are there any under 14 there, and near the age of 12?—There are only six under the age of 14.

12626. Mr. *Liddell.*] He then goes on to state, that it is a general practice in the district to employ boys under 12; is that correct?—It is not the general practice, at all, to employ boys under 12 years of age; and I may say that, since the Act of 1860, we have only employed three boys between the ages of 10 and 12; and those were employed under special circumstances, because the mother was a widow, or the father was unable to work regularly, or from some cause of that kind; and for those three boys I have the certificates by me, and can produce them if the Committee desire it.

12627. It is your practice, then, as a rule, to discourage the employment of boys under the age of 12?—Yes, it is.

12628. Have you a reason for so doing?—It is because we do not wish to be troubled with the education certificates. These are the certificates, if the Committee would wish to look at them (*producing them*). I show the certificates, because, in answer to Question 4051, "Do they get a certificate; do they attend to the requisitions of the Act as to certificates?" Cartlidge says, "No, they do not; I do not hear of anything of the kind." Then, in answer to Question 4052, "Are many of these boys under 12 able to read and write?" he says, "Some; there are some instances where they can do it, and some where they cannot." At Question 4053, "Which is the most common class?" he is asked, and his answer is, "Those who cannot." I have taken out an account of all the boys that we had working yesterday. I sent the bailiff round to get either the signature or the mark of each boy, and I find that we have 46 boys, and out of those 46 we have 37 who can write (and I have their signatures here), and nine who cannot, and out of those nine I think about seven are strangers who have not been brought up at our collieries.

12629. *Chairman.*] Are the 46 boys reckoned at all the collieries?—Yes, at all the three collieries.

12630. Sir *Philip Egerton.*] That answer to Question 4052 was about boys under 12 years of age?—Yes, it was, but we have no boys under 12.

12631. Mr. *Liddell.*] With regard to those nine boys who cannot read or write, you say that they are strangers?—Yes, about seven of them. They have not been brought up at our collieries.

12632. What

12632. What age are they?—We have only one that is 12, the rest are under 16.

12633. In reference to schooling have you anything to say?—In answer to Question 4054, "Is their schooling attended to? he says, "There is a school, and there is a schoolmaster, but the boys are so much occupied with their daily work that they have no time for school, with the exception of Sundays." Then he is asked, "They do not attend the day schools, but Sunday schools?" and he says, "Yes." I may say, that when boys commence working at the pit they will very seldom go to school, and they are very troublesome indeed when they do go. When they commence working they will not take the opportunity of holidays, or any other time when they are off work, to go to the school, and, generally speaking, they are fond of amusement, rather fonder of amusement than of instruction.

12634. Do you deny that they are in the habit of attending Sunday schools?—A great many of them are in the habit of attending Sunday schools; they are nearly all Primitive Methodists, and they generally attend schools of that kind.

12635. Then Mr. Cartlidge is correct in saying that they do attend the Sunday schools?—They do attend Sunday schools.

12636. As regards the number of hours that they work, what have you to say?—The ordinary hours are from six to six, but we do not make an average of more than five days a week throughout the year, and during the whole time that Cartlidge was there we only made five days a week average.

12637. Is it incorrect to say, as Cartlidge does, that they go down at half-past five in the morning?—They go down at a quarter to six, or a little before six; they can get to their work in 10 minutes time or a quarter of an hour.

12638. And they come up when?—They come up immediately after six, when they work full time, but every boy does not attend his work every day, particular boys do not make an average of more than four and a half days a week.

12639. Then, practically, the answer was correct, that they go down about half-past five, and come up about six?—When they are on full time that is about correct.

12640. The next question put to Cartlidge is with reference to the work of the men; have you anything to say upon that?—His answer to that is correct.

12641. We will go on to Question 4068, in which he is asked, "What alteration have you to suggest in the law with reference to the boys?" and he says, "It is the general feeling of the men that the boys should only work about eight hours a day." Is that a correct answer?—That is not the general feeling of the men; I have taken some pains to ask the men who have boys of their own, and are living on the spot, and they all deny that they knew Cartlidge was coming here to give evidence; he was a stranger in the district, and not even his next door neighbour knew that he was coming here to give evidence.

12642. Are the Committee to understand, that as far as the men employed in those three collieries are concerned, Cartlidge came here unauthorised by them to give evidence on their behalf?—Yes.

12643. Do you know who sent Cartlidge here?—No, I do not; but I have been informed that a delegate from the neighbourhood of Rotherham or Yorkshire visited his house occasionally, and I should say that he probably sent him.

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12644. Have you ever communicated with Cartlidge since he gave his evidence?—No, he left the neighbourhood, and I do not know where he is.

12645. In reference to schooling, in answer to Question 4071, Cartlidge recommends that the boys should go to school for so many hours a week, what have you to say upon that point?—I do not think that the parents take much interest in their schooling, because they neglect their education very much before they are 10 years of age; our school is open free to all the workmen who pay to the club, and yet we have very great difficulty in securing an attendance of more than three days a week average.

12646. Do I rightly understand you, that you give schooling free of all charge?—Free to all men who pay to the club; every man pays a shilling a fortnight, and that includes education amongst other matters.

12647. Would it be practicable, that is to say, would it be consistent with the regular working of the colliery, that they should attend school for so many hours a day, or for so many days in the week?—I think it would be better, that if a law were made to compel them to attend school, it should be so many days per week, rather than so many hours per day, because otherwise, it would interfere with the working of the men below, and the surface men.

12648. But if they attend school half the days in the week, would not that necessitate the employment of as many more boys again?—Yes.

12649. Could you obtain that increased supply easily?—Not at the first, and we have great difficulty in getting a sufficient supply now.

12650. Then am I to understand you to recommend that they should attend school for three days in the week, or do you merely wish to go the length of saying, that if any enactment is to be passed requiring their attendance at school, you would prefer that they should go three days in the week, rather than that they should go for half the day each day of the week?—Yes; I do not recommend it, because I think that there are already sufficient means of education for them before they go to work; as a rule, boys, after they have commenced work, do not attend school regularly. I have here a statement, showing the average attendance in the school of the children under 12 years of age, if it is necessary to give it. There are 27 on the register in Class 1, of our school.

12651. *Chairman.*] Is that a day school or a night school?—A day school. Out of the 27 I have mentioned 17 is the average daily attendance, and the average age of the boys in Class 1 is 11 years and 10 months. In Class 2 there are 37 on the register; the average daily number present is 18 only, and the average age is nine years and four months. I could give the other classes if desired.

12652. Mr. *Liddell.*] In answer to Question 4080 your name appears; you are described by Cartlidge as the proprietor, and in reference to you he says: "He is not always there; Mr. Shaw is the head viewer," and you are stated never to ask any questions as to whether the boys can read and write; is that a correct statement?—I do not engage the boys myself; the boys are engaged by a contractor. He employs the boys and

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and contracts for delivering the coal to the pit bottom. I have always given particular instructions to the bailiff to take care that no boys do go down under 12 years of age. I frequently go down into the pit myself, and I have never found one under 12.

12653. Whom do you mean by the bailiff?—Shaw, the under viewer.

12654. *Chairman.*] Is there anybody above Shaw, that is to say, between yourself and Shaw?—No.

12655. Do you call him the under viewer?—He is the head viewer of the pit, as it were; he is always at the pit; these men are generally called under viewers, but "bailiff" is the common term in our district. Cartlidge says that "there is no certificate given or required," the fact being that we do not require any, because we do not employ them under 12.

12656. Mr. *Liddell.*] Have you any further observations to make (without going through this series of questions) in regard to the labour of the boys?—I think not with regard to boys.

12657. *Chairman.*] Do you inquire what are the terms that the contractor makes with the boys when he engages them?—Yes, I know generally what the contractor pays for the boys.

12658. What are those terms?—The average wages that he is now giving for 21 boys, taking into account the lowest wages, are exactly 2 *s.* per day. Cartlidge states in his answer to Question 4093, that the wages run from about 10 *d.* to 1 *s.* 10 *d.* a day, the fact being that we have not a boy under 1 *s.* 6 *d.*, and they run from 1 *s.* 6 *d.* to 2 *s.* 8 *d.*

12659. They are all above 12 years of age, you say?—Yes.

12660. You have put in a paper, showing who are the boys that can write; some of them write much better than others, do they not; in fact, some of them write very well?—Yes.

12661. Do you find that their writing gets worse as they get older?—Some of those boys who write well are boys who have attended the night schools, and whose parents are rather of a better class, and they pay rather more attention to it, and are occupied in assisting their parents to write, or something of that kind.

12662. One of them, I see, is the son of a local preacher?—Yes, he cannot write at all, though he lives within 200 yards of the school.

12663. You do not find then that they decline, as a rule, as they get older?—No.

12664. Mr. *Liddell.*] I must call your attention to Question 4098: "Who engages the boys?" the answer of Cartlidge being: "The managers engage the boys, and they pay them? the stall man has nothing at all to do with that;" is that correct?—No, the contractor engages the boys, that is to say, the contractor who undertakes to deliver the coal from the stall men to the pit bottom.

12665. Does the contractor pay the boys?—The contractor pays the boys.

12666. *Chairman.*] This contractor is a sort of sub-manager, is he not?—He is a contractor taking that working by the piece.

12667. But he has a good many stalls under his control, has he not?—He has no stalls; he merely takes the delivery of the coals from the stall men to the pit bottom; he has the whole of the coal from all the stalls to the pit bottom under his management.

12668. Then he is a sort of manager, at least, he has a great many workmen under his control, has he not?—He has a great many boys, but few men under him.

12669. Mr. *Liddell.*] I understand that the contractor or butty, of whom we are now speaking, has nothing whatever to do with the cutting of the coal?—Nothing whatever.

12670. But merely with taking the coals from the working places to the pit bottom?—Yes.

12671. *Chairman.*] But all the boys employed in the conveyance of coal are under him?—Yes.

12672. Mr. *Liddell.*] In reference to the number of days that the pit works, of which Cartlidge speaks in answer to Question 4099, have you anything to say upon that?—We never make more than 5¾ days, and during the whole time that Cartlidge was with us, we made an average of exactly five days a week in the nine weeks.

12673. Then, it is incorrect to say "We usually work about six days"?—Yes, and he denies it himself; for in answer to Question 4104, he himself says, "They generally leave off at what they call three quarters on Saturday, on account of the pay." The average is not more than five days throughout the year.

12674. *Chairman.*] And how many days do you say it was during the time that he was there?—Five days exactly.

12675. Mr. *Liddell.*] In reference to the visits of the inspector of the district, Mr. Evans, how often has he inspected the mine within any particular period?—Mr. Evans succeeded Mr. Hedley two years ago, and since that time he has been down the pit once or twice, and been at the colliery office three or four times and inspected the plans, and made various suggestions for preventing accidents.

12676. All that Cartlidge says on that subject, is that he never heard of his being there; is it quite possible that Mr. Evans might have visited the colliery without all the workmen knowing it?—Yes; the workmen do not generally know when the inspector comes; they may happen to see him or not; he does not see all the workmen.

12677. But in the event of any application being made to the inspector on the part of the workmen, it would be quite open to him to attend to that application, I presume?—Yes, and I believe that he does attend to all applications of that kind; he frequently has letters addressed to him from collieries in the neighbourhood.

12678. Is it within your own knowledge that those applications are from time to time addressed to the inspector?—I believe it is the case.

12679. The answer to Question 4122 has reference to the time that the stall men can leave off working; have you anything to say upon that point?—Cartlidge says that "The stall men can leave off working so much sooner, and work short hours; but still the day-men and boys have to stay in." That is the case; but when several stall men leave, some of the boys have to leave too, because they are engaged in bringing away the coals which the stall men get, and they must necessarily have less work to do then.

12680. The boys in attendance on the stall men are not unfrequently the sons of the hewers themselves?—I believe very frequently.

12681. Cartlidge is asked in Question 4125 "Is there any system of play Monday in that district"? and he says, "No; no system of that kind." Is that so?—The men do not work regularly; but I think that on the average they work

as

as well on the Monday as on other days; we pay on the Saturday; the fact is that they get 45 per cent. of the weekly quantity the first three days of the pay, and 55 per cent. of the weekly quantity the last three days of the pay; that is the proportion, and it shows that they work 10 per cent. better in the last three days of the week than in the first three days.

12682. *Chairman.*] Is it a system of weekly pay there?—Yes, we pay weekly; we always have done so.

12683. Mr. *Vivian.*] What is the objection to paying on the Friday?—I tried paying on the Friday a few years ago, and I found that the men would not attend on the Saturday, the Chesterfield market which is four miles from our colliery being an attraction which the men could not resist.

12684. There would be a considerable advantage in paying on the Friday, would there not, because the men would have the money to go to market with?—There would be that advantage, but there would be no difficulty if the men were careful in saving a fund to go to market with.

12685. The difficulty really was that they did not work on the following day?—No, they did not; I tried it for six months two years ago.

12686. Mr. *Liddell.*] I will refer you to Questions 4126 and 4127.—"How much can a good stall man earn in 10 hours' work?" the witness is asked, and he says, "It will vary according to the stall that he is in, I mean according to the part of the pit that he is in." The next question is, "Take the average?" and he says, "On the average he will earn about 4 *s.* or 4 *s.* 6 *d.* a day." Now, Cartlidge himself earned 7 *s.* per day, and I have a statement of his wages to show that he earned 7 *s.* per day.

12687. He was a good workman, then, I suppose?—A fair average workman.

12688. Does that amount represent a fair average earning?—Yes, of stall men.

12689. Do any stall men earn more than that?—Yes, some may earn more and some less, depending upon their skill and attention to their work.

12690. Might you fairly strike an average of 4 *s.* to 4 *s.* 6 *d.*, or is that too low?—It is too low; the average of all the men working with Cartlidge, stall men and others, was 5 *s.* 6 *d.*

12691. *Chairman.*] He had day men under him, I suppose?—He had day men under him to whom he paid about 4 *s.* 6 *d.*; then as to his answer to Question 4129, on the wages, I may state that our average stall price in 1851 was 1 *s.* 6 *d.*; in 1856, 1 *s.* 11 *d.*; in 1861, 2 *s.* 2½ *d.*; and in 1866, 2 *s.* 9 *d.* per load; the day wages in 1851 were from 3 *s.* to 3 *s.* 6 *d.*; and in 1866 from 4 *s.* to 5 *s.*

12692. Mr. *Liddell.*] I will refer you now to Cartlidge's answer to Question 4131 in reference to a certain check weighman working when a boy till nine at night; what have you to say upon that?—I believe he is alluding there to an adjoining colliery, the Clay Cross colliery.

12693. In which he did not work himself?—In which he never worked. I do not believe that anyone regularly worked till nine o'clock at night at Clay Cross, unless it was some one who had gone in late in the day; he might have commenced his work at noon, for instance.

12694. Are you sufficiently acquainted with Clay Cross Colliery to speak on that subject?—Yes; I have resided within a quarter of a mile of the works for 18 years.

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12695. In answer to Question 4139, Cartlidge says something in reference to ventilation; what have you to say upon that?—With regard to that, I may say that the ventilation is as good as it is in any other colliery in the district, and I believe quite satisfactory. We have worked the colliery 22 years, and have never had one fatal accident from deficient ventilation, and we have got out of the pit upwards of a million tons.

12696. Have you had any representations from the inspector in regard to the inadequacy of the ventilation?—No, I have not.

12697. He is satisfied, then, I presume?—He is satisfied. Mr. Evans was in the pit about 18 months ago, and we have had no complaints about the ventilation.

12698. *Chairman.*] Is that the last time he was in the pit?—No, I think not; I think he has been in once since then.

12699. Mr. *Liddell.*] Then, the statement that the ventilation is defective because "it is not properly carried out round the workings," is an incorrect statement?—Yes; and Cartlidge told the under viewer that he was perfectly satisfied with the ventilation, and I was through his stall a short time before he gave evidence, and he made no complaints to me about any deficiency of ventilation.

12700. Are the workmen in the habit of addressing complaints to you if they think the ventilation defective?—They would do so.

12701. And what steps do you take, then?—If we found that the ventilation was deficient we should improve it.

12702. If that happened for want of brattices, for instance, you would put up brattices?—We do not use brattices; we should put up doors, if it were want of doors that caused it, or otherwise provide a remedy.

12703. *Chairman.*] You do not use brattices, you say; what do you use?—We work on the long wall system.

12704. Mr. *Vivian.*] Outward or inwards?—We work both ways; both from the pit and to the pit.

12705. Because the witness spoke a great deal of the necessity of carrying the air ways through the goaf, and of their being contracted in consequence of the pressure of the goaf and the swelling up beneath?—Yes, the goaf is apt to press down and contract the air ways, but we have a number of men to restore and enlarge them if they become small.

12706. If you are working backwards to the pit that cannot be the case, can it?—But we get the whole of the coal out as we come; we do not leave pillars; we go a certain distance through the roads, and the ventilation is about the same either way.

12707. But if you are working back and leaving the goaf behind you, you, of course, do not air it?—Still we are taking the coal back through the goaf in each case to a main road in the middle, which road is made generally through the goaf.

12708. Mr. *Liddell.*] In Question 4145, the witness is asked whether it is the fact, that the air ways are not large enough, and he replies, "Yes; and they are not properly attended to and kept in order, because of the expense; the men that are under viewers only do what the head viewers will allow them to do; they dare not

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run into any further expense than that, because the head viewers simply state that the colliery would not pay if they did;" what have you to say to that?—I deny that. The head viewers have never mentioned anything about the expense; their instructions are to keep the air ways in the best possible condition.

12709. Then you deny that the air ways are small?—Yes.

12710. In answer to Questions 4149 and 4150, he makes some statement in reference to the air ways being closed, what have you to say to that?—The air ways do become a little smaller by the natural weight; but as I said before we restore them and enlarge them as required.

12711. Will you explain the term "natural weight"?—That is the weight of the goaf after the coal has been got away, that is to say, the pressure of the roof on the floor where the coal has been cut.

12712. That contracts the air ways?—That contracts the air ways slightly.

12713. Mr. *Woods.*] Do you build walls to support the roof?—Yes, we build walls, too.

12714. Then the air way is between the walls, is it?—We build walls at right angles with the face of the coal; they are to support the roof, and to save timber too. We build walls on each side of the air ways, too.

12715. Mr. *Liddell.*] The answer to Question 4152 has reference to the closing of these air ways by a natural process, and Cartlidge says that they will be closed "if there are not more hands put into it"?—If the air ways were closed the colliery would close too; we cannot work without air; we should have, in fact, to make fresh ones, or cease working.

12716. Then you do employ a sufficient number of men to prevent that, as I gather from you?—Yes.

12717. Mr. *Vivian.*] But that all arises, does it not, from working outwards from the pit, leaving the goaf between you and the pit?—No; there is no difference whether we are working towards the pit or from the pit.

12718. Surely when working towards the pit you leave the goaf behind you?—Yes, but we have to make a road through the goaf to carry the coals; the main road is made in about the centre of the workings. (*The Witness drew a sketch and explained it.*)

12719. Mr. *Woods.*] You would always drive through the goaf, would you not?—Yes; we could not keep a road next to the face of the coal; the pressure of the roof would prevent our keeping a sufficient road for all the stalls.

12720. Mr. *Liddell.*] In answer to Question 4156, Cartlidge states that he made representations to the viewer in reference to the air ways; did he make any complaint of that kind?—The viewer assures me that he never made any complaint, but that he once said that he was perfectly satisfied with the air ways and the ventilation.

12721. He goes on to say that the answer he got from the viewer was, that it was not his business?—Yes, and the viewer denies that altogether.

12722. Then he states, that "the owners in general do not listen to the complaints of the working men; it is the viewers that you have got to make your complaints to?—Owners who do not take an active part in their collieries do not generally go into the details of complaints with the men; but they would listen to complaints from any man, I believe; and I am always on the spot, and ready to listen to any complaints that the men make to me. I am invariably there.

12723. You have already said that from the inquiries you have made, you are satisfied that Cartlidge did not represent the views of the workmen in your district. Question 4164 has reference to that?—Yes; Questions 4162, 4163, and 4164, all have reference to that. I am quite sure that he did not represent the views of our men; I know that not one of our men authorised him to come here and give evidence; and I have also made inquiries at five other collieries in North Derbyshire, which, with ourselves, are getting about 9-10ths of the coal got in North Derbyshire; and I have with me letters from the managers of those collieries, saying that Cartlidge is a stranger, and that their men knew nothing of him.

12724. In regard to the payment of wages, he states this, "as a general thing, it is the clerk that pays us our money," is that correct?—No, as a general thing I pay the stall men myself; Cartlidge received his wages 10 weeks while he was there; he worked rather less than nine weeks, but he happened to be there on 10 pays seven times out of the 10, I was there myself; I am always there as a rule to listen to complaints.

12725. And if you are absent the clerk does pay them, I suppose?—Yes; I think there must be a misprint in the answer to Question 4171. The Question is, "Have you ever had any explosions in the mine where you are now working since you have been there," and the answer stands, "Yes." It is printed "No," in the "Colliery Guardian," and "No" is correct; and indeed, it would seem to be so from the answer to the next question, in which he says that there have been no accidents there. In answer to Question 4174, he says that miners are removed for making complaints. Now, the fact is, that we have never removed one that I know of for making complaints, and generally we have no complaints from them, except about wages. We have no complaints about ventilation, or the matters that he is alluding to. In Question 4176, he is asked, "Have you anything to say in reference to the propping?" and his answer is, "The proprietors or the managers, I cannot say which it is, but anyhow it is the company, make it compulsory on the man that is employed in the stall, and that works the stall by the ton, to pay for all the timber that is used in the stall, and all that is lost." I may say that a few years ago we found very great difficulty in getting the men to take ordinary care of the timber, and to take the trouble of bringing it out of the place when it had answered its purpose, so as to use it twice over; and to avoid that difficulty, we agreed with the men to give them 2*d.* per load (they call the loads tons) advance, and they found their own timber, and tools as well, for it included other things besides timber. Now, this 2*d.* per ton, which Cartlidge would get in the ordinary way, amounted, during the time that Cartlidge was working, to 3*l.* 11*s.* 10*d.*, and the cost of repairing his tools would be about 1*l.* 2*s.* 6*d.*, leaving 2*l.* 9*s.* 4*d.* to be paid for timber, for which he actually paid only 6*s.* during the whole time he worked with us. We always put a sufficient stock of timber in the stalls without making any charge, and we only debit the men with about one-half of the actual

cost

cost of the props that are broken while they are working the stall. We renew every broken prop, and, besides that, we allow them 2*s.* 6*d.* per dozen on them; that is to say, we charge them 7*s.* 6*d.* per dozen for the new props, and we give them 2*s.* 6*d.* back again when they are broken. That leaves 5*s.*, whereas Cartlidge says 8*s.* 6*d.* in his evidence.

12726. Mr. *Woods.*] But is it the fact that that system of supplying timber to the men in your mines is part of the contract with the men? —Certainly; and it is a contract that has been very beneficial to the men, and which the men are all satisfied with, and from which they would not go back to the old system, if they could avoid it.

12727. *Chairman.*] You consider that it is an advantageous system to the workmen?—Yes.

12728. That we have nothing to do with, but do not you consider that they are induced by it to save money at the expense of their own lives, and the lives of other people?—No, I do not; we have not found that from experience. We have only had one case of fatal accident, from fall of roof, since that was adopted; and that accident was at a place where we found the timber.

12729. As a fact, you have not found that the system in question has increased accidents by falls of roof?—No, we have not found it so.

12730. Do not you think that it is a likely thing for a workman of a reckless disposition to say, "I will rather run the risk than pay my 1*s.*?—No, inasmuch as the under viewer, who is in the pit every day, is obliged to see that the men have a sufficient quantity of timber. I have the rules with me.

12731. These are pit rules to which you now refer, I suppose?—These are special rules, but framed according to the provisions of the Act.

12732. Will you read the special rule as to that work?—"The under viewer shall see that the air courses and air crossings are kept properly open; for which purpose the under viewer shall travel through the air courses at least once a week. And the under viewer shall see that pack walls, props, sprags, and airtight stoppings are immediately put where required, and that the various roads and workings are well propped, and in good order."

12733. Mr. *Woods.*] Even supposing that this system did cause a destruction to human life, would it be the lives of the men who provided the props that would be sacrificed?—It might be so, or it might not.

12734. But would the men who ran this increased risk to save a small amount of money be included amongst the persons whose lives would probably be sacrificed, if any lives were lost?—Yes.

12735. Mr. *Vivian.*] How long have you adopted this system?—About four years; we only adopt it at one colliery, namely, at the one where Cartlidge worked; we do not adopt it at either of the others.

12736. During these four years, I understand you to say, you have had no fatal accidents?—We have had two fatal accidents, but none from deficiency of props.

12737. Mr. *Liddell.*] I understand from your evidence that it is the duty of the viewer to see that the props are sufficient; and if they are insufficient it is a distinct infraction of the special rules of the pit, and for which the men are liable to penalties?—Yes; and it is also the duty of the stall men as well; I will read the special rule on that point: "The stall men shall build pack walls and set a sufficient quantity of props for safely supporting the roofs in their stalls and roads; they shall see that the packs are well-built, and that sufficient props are immediately set for safely supporting the roof."

12738. Have you ever brought men up for infraction of the special rules, and got the penalties enforced against them?—We brought one man up for refusing to repair his air-way; the magistrates thought that it was stupidity on the part of the man, and they inflicted a nominal fine of 1*s.* upon him.

12739. Is there any other part of the evidence of Cartlidge to which you wish to refer?—At Question 4196 he is asked, "Is your colliery an exceptional case in regard to this timber?" and his answer is, "It is an exception to all the collieries that ever I have been at or heard of." The next question is, "Then it is not a general complaint, but a particular complaint connected with this one colliery?" and he answers, "Yes, with that one company." Now, I may say that the only colliery working the same bed of coal, and that is one which is within a mile of ours, are charging the men for the timber, and have done so for a longer time than we have, and they charge more too than we do. In fact it is a general practice in Derbyshire. These answers show that Cartlidge knew very little of the district.

12740. Mr. *Woods.*] What was the next colliery?—Grassmore colliery.

12741. Mr. *Liddell.*] Was this arrangement in reference to the supply of timber made at the suggestion of the workmen, or was it made at your own suggestion?—I think it was partly the suggestion of the workmen and partly our own; it was a mutual agreement; then in answer to Question 4207 he says, "They have no bye-laws to the effect that a man shall pay for the timber; but it is simply that it is stopped and taken out of the men's money;" I have an agreement signed by Cartlidge himself to the effect that he should pay so much for timber if the Committee would wish to look at it, in fact that he should pay the price which I have named when he first commenced.

12742. *Chairman.*] Will you read the words of the agreement to which you refer?—The owners will stock each stall with rails, puncheons, lids, and sprags, and the stall men must afterwards provide all new timber, leaving the same stock of timber on the termination of their service; the stall men must always provide all picks, shovels, noopers, wedges, hammers, drills, rammers, scrapers, needles, wood, ringers, and chains, bells, and all other tools whatever required and considered necessary by the manager or underviewer for the proper and effectual working of the coal; the company will provide puncheons at 7*s.* 6*d.* per dozen, sprags at 1*d.* per running foot, and lids at 6*d.* per dozen, the value thereof being deducted from the price of coal getting before the wages are paid.

12743. Mr. *Vivian.*] That is signed by Mr. Cartlidge, is it?—Yes.

12744. *Chairman.*] And you believe that to be a common system in Derbyshire?—It is not a common system, but it is by no means uncommon.

12745. Then in answer to Question 4217, which has reference to the time that he was in Derbyshire,

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shire, Cartlidge says, that he was there 12 months; I cannot find that he was there above seven; then there are several answers about his getting less wages at our colliery than at any other; that is rather an absurd sort of evidence, because he admits that labour is scarce, and the consequence would be, that men are wanted, and they would get employment at the average wages at any place.

12746. Mr. *Liddell.*] The next important point is, in reference to forfeitures for deficient weight, what have you to say on that?—Most of those statements about forfeitures for deficient weight, I think, allude to the Clay Cross colliery, about which I know very little, but I have asked the question of our men's check weighman, who has been there nine months, and he says, that there has never been a single dispute between him and our weighman since he has been there as to the weights, and that the total forfeitures during the whole nine months that he has been there have not exceeded three tons, and I have had no complaints as to the forfeitures.

12747. General *Dunn.*] You say, I think, that latterly the number of accidents from falls of roof has diminished?—We have only had two fatal accidents from the falling of roofs since the colliery started 22 years ago.

12748. Here is a return which gives 228 accidents in 10 years?—I am speaking more particularly of our own colliery; I hardly know the general average.

12749. But according to this return in the district in which Derbyshire is, there seems to be a very large increase of accidents from falls of roof?—I think that falls of roofs are the chief accidents in Derbyshire.

12750. The fire-damp accidents are small in number?—There are very few from fire-damp.

12751. You are not able to say whether the accidents in the other collieries have increased?—I think they have decreased in proportion to the number of tons turned out of the pit.

12752. Can you state what the proportion is? I think it is more than 100,000 tons to each man killed.

12753. In your own pit, do you mean, or in the district?—In the district; I think it is considerably more than 100,000 tons to each fatal accident.

12754. In how many collieries?—I forget how many there are.

12755. Mr. *Wood.*] Is the whole amount of the wages of a collier at your pits computed by the weight of the coal which he gets?—Yes.

12756. Is there no yardage system?—There is certain work where it is done by the yard as well as by the weight, where a collier is driving headings for instance.

12757. Is there anything for building pillars?—Not in the stalls; it is included in the tonnage price.

12758. Can you give any approximate proportion between the yardage and the weight price in the amount paid per annum to all the men?—We have very little yardage price; it is only where we are driving roads.

12759. Perhaps you can mention some proportion?—I should not think that the yardage is anything like one per cent. of the whole.

12760. Mr. *Liddell.*] In regard to masters making a profit out of the Pit Club Fund, which is a subject referred to by Cartlidge in his answer to Questions 4322 and the following questions, have you anything to say upon that; is that correct, and do they make a profit out of it?—No, we do not. I may say that each married man pays a shilling per fortnight; each single man 8 *d.* per fortnight; and boys earning less than 1 *s.* 6 *d.* a day 5 *d.* per fortnight. For that we give men or boys earning more than 1 *s.* 6 *d.* per day 7 *s.* a week in case they meet with an accident at the pit, and 3 *s.* 6 *d.* a week if they are sick, and half the above rates to boys who pay 5 *d.* per fortnight. We find a doctor to attend the men themselves, and their wives, and the whole of their families, and we educate the whole of the children.

12761. Does that leave much margin for profit?—No, it costs the company about 100 *l.* a year.

12762. Mr. *Woods.*] Out of pocket, you mean?—Out of pocket.

12763. *Chairman.*] Do you see any great objection to admitting representatives of the workmen to assist in the management of that fund?—Many years ago, before we made it a sick fund as well, and before we had education included, the men did assist in the management, but we found that they always wanted to meet at the public-houses, and to have drink at the meetings, and we did away with that some years ago.

12764. But are you aware that there is a feeling among the men that they would desire to have a share in the management of a fund which arises from their own subscriptions?—Our men do not complain that they have no control over it. They know that they can always have their money if they bring their medical certificates, and that there is no objection to their children going to school and getting all the advantages of the fund.

12765. I am not supposing that there is any illiberal treatment of the workmen on your part, but it is more satisfactory to men to have a share in the management of a fund that arises from their own contributions, is it not?—They might consider it so, but I do not think it would be so considered generally by our men.

12766. If you could find a proper place of meeting, I suppose you would not object to such an alteration of the system?—I do not think that our men desire it.

12767. Mr. *Woods.*] What is the gross expenditure per annum of that fund?—The fund amounts to about 250 *l.* per annum, and we spend about 350 *l.*

12768. If you found it made very troublesome to you by having too many managers, do you think you would be inclined to retire from it?—Yes, I think we should be very likely to do so. I may state, that in Cartlidge's stall the club was 5 *d.* in the pound.

12769. *Chairman.*] Do you think that if you were to admit the workmen to a share of the management, it might lead to your withdrawing the 100 *l.* a year, which you say you now contribute to the fund?—I do not say that; but it would lead to additional trouble.

12770. Mr. *Woods.*] Why do you have this system at all; I suppose you have some reason for it?—The men generally are not a saving class, and we have that as a fund to apply to in case they meet with accidents or sickness, which they are of course liable to; we tried it on the voluntary plan for several months, and we found that every man paid it just as much as when we deducted it from the wages; it was a little more trouble to us, but we tried it for some months.

12771. Do

12771. Do you think that this fund confers any direct benefit upon you or the owners of the mine?—No, I think not, except it may be general benefit from the improved education of the boys.

12772. *Chairman.*] But you are not speaking now of the schooling fund, are you?—It is all one fund; we pay a doctor and a schoolmaster, together about 175 *l.* out of the amount.

12773. In many of these cases of accident the masters would be liable to an action for damages, would they not?—No, I do not think they would; but if a master is liable, I do not think that the club would relieve him from the liability.

12774. Do not you think that a man by getting relief in this club is, I will not say actually prevented, but is dissuaded from taking proceedings at law?—No, I do not think so; because, perhaps, nine-tenths of the accidents happen from a man getting his fingers pinched, or from some very trivial things, which prevent him from working for a few days only.

12775. If a man get his fingers pinched for want of the master taking proper precautions, he would have a remedy against the master at law, would he not?—Yes, he would, if the master did not take proper precautions; but we think that we do take precaution.

12776. To a certain extent, this subscription of the master is to indemnify him against actions, is it not?—No, not at all, because we do not think it would.

12777. Mr. *Vivian.*] In what proportion of the accidents which happen would an action lie against the masters by reason of their not taking proper precautions?—We have had very few accidents, and I do not know that we have had any accidents that would make us legally liable.

12778. So that it has never entered into your mind to conceive that this fund could in any way relieve you from any such responsibility, nor did you ever design the fund, I suppose, with that view?—No, that was not our view, and I do not think it does relieve us.

12779. You designed it for the general benefit of the workmen?—Yes.

12780. And with no selfish motives whatever?—No.

12781. Mr. *Liddell.*] Anything that tends to improve the social condition of men, and to add to their comfort, would benefit the employer only to the extent of securing a better class of workmen, and of being a means of retaining the services of such workmen?—Yes. Mr. *J. Ward.* 5 July 1866.

12782. That is the indirect advantage that a master obtains by studying the well-being of his workmen, is it not?—Yes.

12783. *Chairman.*] Are you aware that a large number of the workmen in Derbyshire petitioned for this inquiry?—No, I am not aware of that; I do not think there were any who petitioned from our colliery, and I do not think there are three men there that know that the inquiry is going on.

12784. You would be very much surprised to hear that several thousands of workmen had petitioned?—Yes, I should be surprised to hear that many of our men had petitioned.

12785. If it were proved that there were several thousands of workmen that had petitioned, you would be surprised perhaps to find how little you know of what was going on among the workmen?—Yes, I should be surprised if there were several thousands from Derbyshire that had petitioned.

12786. With reference to the club fund, although you might object to the men having a share of the management, should you object to publishing accounts, showing the way in which the money is expended?—I think that if we had to publish accounts we should be very likely to give the thing up altogether.

12787. You would object even to publishing accounts?—Yes.

12788. Mr. *Woods.*] I suppose that if it were necessary you would not mind giving evidence upon oath that you do contribute about 100 *l.* a year to this fund?—No, I would not object to that.

12789. *Chairman.*] I hope you understand that I do not wish to throw any doubt upon that statement?—Quite so.

12790. It is only as to the principle that I imply any doubt?—Yes, I understand it so.

Mr. J. W. Day, called in; and Examined.

12791. Mr. *Liddell.*] I believe you have an application which you wish to make to the Committee?—I wish to know who sent Cartlidge here as a witness; he said that he came as a stranger into Derbyshire, where he had only worked about seven months, and that he came to represent the North Derbyshire colliers, and I wish to know by whose authority he came here. Mr. *J. W. Day.*

Mr. John Normansell, called again; and further Examined.

12792. *Chairman.*] You have heard the question which Mr. Day has just asked; did you suggest the calling of Cartlidge as a witness?—Mr. M'Donald being here, watching the inquiry on behalf of the miners of the United Kingdom; Mr. Edwards, who was at that time the agent of the Derbyshire working miners was written to on the subject, and was told that witnesses would be wanted at a certain time to give evidence to the Committee, and that he must send them up; he then asked for me to come over to him, and I went and saw somewhere about a dozen men at Chesterfield, and the matter was then arranged in this way. William Ball, who works for the Sheffield Coal Company, was appointed to come here to give evidence, and another man that lives in Chesterfield, and another from the neighbourhood of Clay Cross, because that was an extensive coal-field. They knew Cartlidge, and considered that he was a very respectable man, and a man that could give evidence; although he had not been working long at this Wingerworth colliery, he had been in the district a considerable time, in the neighbourhood of Whittington. He was asked whether or not he had any objection to give evidence, and of course he had not any; Mr. *J. Normansell.*

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any; that was the reason why he came. I saw Cartlidge myself, so did Edwards, and so did all of us; I told him to make himself generally acquainted with the grievances of the men, and showed him the petition that had been sent to Parliament for the purpose of getting this Committee, and for anything I know, he did make himself acquainted with the grievances of the men. The thing was in the hands of Mr. Edwards, the Derbyshire agent, entirely. Mr. Edwards died about a fortnight ago. They have an association of miners in Derbyshire, who placed the thing in the hands of Mr. Edwards to settle how many men should give evidence before the Committee. There were three men appointed, but I believe that the Chairman of the Committee, or some other member of the Committee, said that it was sufficient to have one. There were three Derbyshire names sent here, and it was not we that selected Cartlidge at all; there was one selected for examination out of the three, and it so happened that it was one who had not had so much experience as the others. I asked how long he had been working in the neighbourhood of Chesterfield, and the Derbyshire men themselves told me that he had not been working there so long as the others. I believe that, on the whole, the Derbyshire men are dissatisfied that the Committee have not had more witnesses from that district here, because it so happens, that Cartlidge, the witness who was sent for, has not been in the district so long as the other two; in fact, the other two who were selected have been there all their lives.

12793. How long before the inquiry was it that you saw Cartlidge, at the time when you went over to Mr. Edwards?—It was, I should think, six weeks before he came here.

12794. And you suppose that between that time and the beginning of the inquiry, he had been making himself acquainted with the facts?—I saw the man myself, and told him to do so; in fact, he wrote to me, and told me that he had been over to Clay Cross to make inquiries there.

12795. A good deal of the information he gave, whether correct or not, may have been acquired by him since you saw him?—Yes; I may say, that there are other witnesses ready to come for Derbyshire, if the Committee require them.

Mr. JOHN THOMAS WOODHOUSE, called in; and Examined.

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12796. Mr. *Liddell.*] YOU are a Mining Engineer, I believe; Vice President of the Northern Institute of Mining Engineers, a member of the Institute of Mechanical Engineers, and manager and consulting engineer to many collieries in the Midland Counties, and other districts?—Yes, I am.

12797. Do you recommend a fortnightly payment of wages?—On full consideration, I recommend a fortnightly payment of wages, and I am opposed to a weekly payment.

12798. On what grounds?—I think that the payment of weekly wages affords, unfortunately, a greater facility for a certain amount of extravagance which prevails amongst some classes of the workmen; and I think that the advantage of the weekly wage is not commensurate with the loss; I mean the loss to the workmen themselves. It is not a question with me as to the advantage of the masters. I think that if it were desirable to pay weekly, the masters would be found quite willing to do so, and I do not think that any obstacle would be thrown in the way by them. It entails a little more labour in the office; but that ought not to be a consideration, if it were really for the benefit of the workmen.

12799. As a matter of fact, are weekly wages paid in many instances?—Yes.

12800. *Chairman.*] Have you had any experience of weekly wages?—Yes; at several of the collieries under my care we pay weekly, and at others fortnightly.

12801. And as the result of that experience you prefer the fortnightly payment?—I prefer the fortnightly merely for the sake of the men, not for our own consideration at all. With submission, I do not think that this is a question for legislative interference, but it is a matter that can be arranged between master and men very well indeed, or which ought to be.

12802. Mr. *Liddell.*] Are means afforded at the collieries under your charge for the education of the children, and will you state the particulars of attendance, and the cost to the employers?—There is no want of opportunity or means of education, but the number of modes adopted is so great that it is almost impossible to describe them. Perhaps I may be allowed to put in something on the subject which may not be uninteresting. It is a newspaper report of a meeting of the Nottinghamshire, Derbyshire, and Leicestershire Association for giving prizes.

12803. This is a report in a public newspaper of a public meeting to which you are now referring, I suppose?—Of a private meeting; it is an account of the distribution of prizes amongst the associated schools in the counties of Derby, Nottingham, and Leicester. I may say this much on the subject, that that is supported by voluntary contributions from the different collieries, and they all have an opportunity of availing themselves of it, that is to say, of bringing their children to be examined, and to receive prizes; and we find the effect very beneficial indeed in most of the collieries. There is now scarcely an instance where youngest boys cannot read and write; at any rate, they can read; I mean that they are able to read the Bible and the Testament, and ordinary books. There are many instances where people will not send their children to school, which is a very grievous and unsatisfactory state of things; but we cannot force them to do it; we can only give them the opportunity.

12804. Speaking generally, you are in a position to state that the means of education afforded are ample?—Yes.

12805. And that the workmen avail themselves extensively of those means?—They do.

12806. In regard to forbidding boys to enter the mines until they are 12 years of age, and limiting their working time to eight hours per day up to the age of 14, will you state the result of your experience upon those points?—There is one objection to limiting the employment to boys of 12 years of age, which is this, that they frequently find (I am speaking practically now) other occupations if they are not permitted to go in sooner. The parents will in some way or other find occupation for their children, in order to avail themselves

themselves of their earnings as soon as they possibly can; and one of the greatest difficulties that we experience is getting at the real age of the children. We have to go to the registrar to get at the ages, for if you make the ordinary inquiry of a child, "How old are you?" it will be sure to answer, "Please sir, I am 12." I go underground frequently myself, and always speak to the boys and children. I can always from practice discover who has been at school, and who has not; it is a very simple thing to do. If you ask a boy his age, "How old are you, my little man?" he will answer, "I am 12 years old." His mother tells him to do that, simply for the sake of getting the poor boy employment.

12807. Do I rightly understand that the inference we are to draw is, that if you prohibit the employment of boys below the age of 12 in collieries, as a matter of justice that restriction must be extended to all other trades?—That I do not know; the trade of a miner is very peculiar, his occupation being belowground.

12808. I want to know whether it is your opinion that even if you forbid the employment of a boy under the age of 12 in a particular branch of industry, you will not prevent the employment of that boy in other branches of industry?—In that particular I can only speak inferentially; I know that if we prevent boys between 10 and 12 years of age from coming into the mine, they find occupation in other branches of industry. I do not understand those other branches of industry well enough to be able to say whether they are more suitable for young persons or not, but that is the effect that our prohibition of the employment of boys under 12 years of age would have. We find this also, that when once boys get into a mine, they are put into a moderate occupation, such as minding the doors; in that way they get a taste for it, and prefer being in the mine to going into other trades.

12809. The prohibiting by law of the employment of boys at that age in collieries, would not prevent their being employed at other trades, and by such a prohibition, therefore, you would place that particular industry at a disadvantage?—No question of it.

12810. Have you any females employed in your district?—None whatever.

12811. Will you state your opinion in regard to the appointment of sub-inspectors to aid the present inspectors in their duties?—I think that the appointment of sub-inspectors as sub-inspectors would be a great hindrance instead of an assistance, unless they were appointed by, and were under the entire control of the inspectors themselves. In that position a sub-inspector would be a sort of pupil, and would be trained to take the position of inspector in due time, when he became sufficiently informed and educated. I think that we must draw a distinction between the sorts of men who might be appointed. There are men who might be appointed (I am speaking always of young men, because they would have the advantage of training) from the ranks, and men who might be got from the more educated classes of people, rather above mere workmen. I think that it is very essential indeed, if there are to be assistant inspectors (for I would rather put it in that shape, and call them assistant inspectors, and not sub-inspectors), that they should be young men trained in all the usual elementary knowledge that most people possess, knowledge of geology, chemistry, and mathematics, for instance; the knowledge that everybody in the present day possesses. I would put such a young man under the rule of the inspector, and make him an assistant inspector, he being responsible to the inspector, and the inspector being responsible for his acts, but I would not let him have any authority in himself.

12812. Do you object to the word "sub-inspector" as appearing to imply an inferior person?—No; but as appearing to imply a person with power. I want to draw a distinction between a person in power and a person acting under direction, and therefore I substitute the word "assistant inspector" for "sub-inspector." An inspector ought to be a responsible man, and all officers associated with him or under him ought to be responsible to him; we must not have a divided responsibility.

12813. Mr. *Ayrton.*] The assistants would help the inspectors to ascertain the facts, but would not form a judgment upon them, according to your view, I presume?—Just so; the assistants would go round in the same way as my own pupils go round, and would report in writing what they saw and heard, but by no means should they interfere with anything. By that plan I think we should get a very superior set of inspectors indeed.

12814. Mr. *Woods.*] Whenever there is a vacancy among the inspectors is it within your knowledge how many qualified applicants there are for the post?—I know that a very great many applications have generally been made, but how many I do not know.

12815. You know that there are many applications already, but you have spoken of a system of training inspectors?—I want to do away, if I can (I speak respectfully), with the patronage system of appointing inspectors. Let men be appointed on their merits, and not merely because they possess influence.

12816. Probably on your system they might be appointed by seniority, might they not?—Seniority in training and in accomplishment.

12817. When their turn came they might be appointed?—Yes, certainly.

12818. Do you propose that those assistant inspectors should have any pay?—No, I would put them in the position of pupils. I must say, however, that I have not much considered that point about the payment, but I think I would not propose that they should have any.

12819. In making this recommendation have you considered the views which the mine-owners might have on this question of having these young men ranging about in their works?—Yes, I have.

12820. Do you think that a number of such inspectors would be agreeable guests in collieries? Yes, I think so; I think that they would be equally agreeable with my own pupils, and I have never found any objection. Of course with young men there are sometimes undesirable things occurring, but they would occur very rarely, I think.

12821. Mr. *Liddell.*] Do you consider that the work at present expected to be done by the inspectors is such as they are able to perform; or do you think that they have more to do than they properly can?—I am quite clear upon this, that the present inspection is totally inadequate; there is no question about it.

12822. Then I assume that it is your opinion that the amount of work thrown upon them is more

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more than they can adequately perform?—Most certainly; it is utterly impossible for them to do it.

12823. Have you made any estimate of the minimum number that would be required adequately to perform the duties of inspection all over the kingdom?—I think that in the fiery districts, leaving out Scotland, with which I am not so well informed, and Northumberland and Durham, and taking the fiery districts that I know, Yorkshire and South Wales, the inspectors ought at least to be doubled numerically.

12824. The present number being what?—Twelve, altogether.

12825. Speaking merely of the districts with which you are acquainted, do I rightly understand you to think that the number of inspectors ought to be 24 instead of 12?—No, I will not go so far as that; I say that they should be doubled in the fiery districts. I think there should be 18.

12826. In the fiery districts the number ought to be doubled, you say?—Yes; assistants would be useful in the district where I live. We have one man, Mr. Evans, for Nottinghamshire, Derbyshire, Leicestershire, and Warwickshire, and he seems to me to be always toiling and always at work, but we should like to see more of him.

12827. Is it your idea that this staff of assistant inspectors, these persons who are to be trained to become inspectors in after life, should be empowered to give information to the inspectors?—That is my notion that they should give information to the particular inspector under whom they act.

12828. Mr. *Ayrton.*] And he would give his directions upon what they had observed in their examinations?—Yes.

12829. Mr. *Woods.*] I think you recommend that these men should be appointed by the inspectors?—Yes.

12830. You are aware that at present the inspectors are appointed by the Home Secretary, and that he is responsible to Parliament?—Yes.

12831. But those assistant inspectors whom you recommend would not be responsible to Parliament, would they?—No, excepting through the inspector himself; my object in that is to ensure the due exercise of influence and authority. As long as the young man was appointed by the inspector he would be responsible to him and liable to his control; but the moment any other authority intervenes the control goes, and the inspectorship would be a nullity.

12832. For what reason do you think it would be desirable that the control of Parliament should be removed from over the assistant inspectors. Will you explain that to the Committee?—I did not explain sufficiently full, perhaps, the sort of persons I meant to suggest, that the persons proposed as assistant inspectors should go through an examination (which examination should be made by persons appointed by the Home Secretary), upon the recommendation of the inspector. For instance, I will take my neighbour, Mr. Evans; he sends up Mr. Smith, we will suppose, and says, "I advise this young man to be put in." Mr. Smith is then subjected to proper examination under the direction of the Home Office, and, after that, if the Home Office return him as competent for being put in as assistant inspector, he is put in under Mr. Evans accordingly.

22833. Mr. Evans, the inspector, is to put him in, as I gather from you?—Yes, he is in the first instance to recommend him.

12834. Mr. Smith having been examined by the Board of Examiners, then the inspector is to have the appointment of him?—Yes.

12835. The inspector would not be responsible to Parliament for making that appointment?—No. I do not know how far the bare fact of the Government having examined and approved of that person would give responsibility. I want to insure the authority of the inspector over his assistant, and that can only be done morally.

12836. But by the process which you recommend, I apprehend that the inspector, not being a Member of Parliament, nor a Minister of State, cannot be called to account by Parliament for making the appointment?—With submission, I think he can; he is the servant of the State, and paid by the State.

12837. Mr. *Liddell.*] These assistant inspectors are to give information to the inspector, as I understand you. Do you contemplate their having authority in any way to interfere with the management or working of the mines, or even to make suggestions for improved management to the owners or managers of the mines?—No, certainly not.

12838. They are merely to collect information, and convey that information to their inspectors?—Yes; and if you will permit me, I will endeavour very briefly to describe the sort of information they will collect. They descend in the pit, and they observe an irregularity, first of all in the winding, and find signal apparatus out of order. They then go over to the doors and find that some of the doors will not shut of themselves, and that, of course, is wrong. They find some part of the pit insufficiently timbered; that is to say, they find in the face of the working not a sufficient number of short props set, and men holing or curving underneath without proper protection. They find lamps not properly cleaned and not locked, and they find other irregularities, all of which come within the notice and authority of the inspector. They make notes of these things after their inspection, and immediately record them in writing, and place them in the inspector's hands.

12839. Mr. *Woods.*] This is in some ideal mine, I apprehend?—No, quite a practical one. I will take, by way of illustration, a colliery well known, of which I am consulting engineer, the Oaks Colliery at Barnsley.

12840. Mr. *Ayrton.*] You are, as I understand you, pointing out the parts of a mine which ought to be examined with a view to its safety?—Yes, by the inspector's assistant.

12841. Mr. *Liddell.*] To proceed with your description, the inspector will, I suppose, at once act upon the information so given him; you would not consider it necessary that he should verify these statements *in propriâ personâ*, but only that he should communicate with the owners and managers of the particular mines, and direct that these things should be put right?—Yes; but the very fact of having that supervision, and of the knowledge on the part of the managers that the mines will be looked at, would keep things straight.

12842. Then you contemplate the additional advantage, as I understand, of these young men, pupils, as it were, of the different inspectors, being trained all this time to fill the office of inspector when their own turn should come?—Yes.

12843. An eligible class, as it were, from which to derive your inspectors?—Yes.

12844. You propose that these men shall all be examined in the first instance. Is the Board of Examiners to be appointed by the Secretary of State, in the first instance, in your idea?—Yes.

12845. And what class of men would you wish to serve upon this Board; how many should it consist of, and how should it be composed?—That I am not prepared to say, not having considered that part of the subject much. Of course they must be gentlemen having a knowledge of the subject they examine upon, and they must be a sufficient number to form a quorum, but beyond that I am not prepared to say anything.

12846. Is there any institution in this country in existence in connection with which you could place this Board of Examiners?—I am not prepared to say.

12847. Is there a mining school?—Yes, there is a school in Jermyn-street.

12848. Would you select the examiners from the members of that institution?—Undoubtedly I should have one or more from that institution; there are no men so well qualified to examine upon those points as the members of the Mining Institution. I speak now from knowing them.

12849. I presume that you would require something more than mere scientific knowledge; you would require some practical knowledge on the part of the examiners, would you not?—Some practical knowledge is very desirable, but inasmuch as the practice of these young assistants would have to be gained in the pit, I should pretty well confine the examinations to theoretical knowledge. They will get the practical knowledge below.

12850. What is your opinion with regard to the suggestion which has been made that the agents, overmen, and chief managers of mines should be subjected to a scientific examination before a Board of Examiners?—I think that that should be confined to the viewers; I mean to the men who are trained viewers.

12851. But you would require all viewers to hold certificates of competency, I suppose?—Yes, I would; such men as have been trained regularly, as men are trained in the north of England, paying a premium. I think that would be a very desirable thing in their case; but I think I should not subject the other branches of the men to the same test, because that would rather serve as a hindrance to the advancement of men from the ranks. A great many of our very best men have come from the ranks, and were men, who, perhaps, in the first instance, could hardly read or write; and I may illustrate that, without any want of respect, by naming George Stephenson for one, and George Elliott, who is another well-known man. Those men were raised from the ranks, and were raised by their practical hard-working and industry, and to subject such men to a test of that sort might be, perhaps, rather a hindrance than otherwise. But when men propose, in the first instance, to launch forth in the world as understanding the question, and as having been trained to be viewers, I would subject those men to a very strict examination indeed.

12852. Do you not think that, requiring that examination, and requiring that they should hold certificates of competency would tend to diminish the supply of such men?—We should not have so many candidates, perhaps, but I think we should have better inspection. There is one thing in reference to inspection, which I should like to refer to, and which I have not mentioned yet. It is common to understand, when speaking of colliery inspection, that it has reference to the underground management and ventilation, and those departments; but in many districts the amount of care in the management of machinery has more to do with accidents than the underground work; hence, one of the difficulties of raising men from the ranks to take all the duties of inspection. There are many men in the ranks who can take a particular duty, but cannot take all the duties. These young assistants that I am speaking of would be trained in all the duties; they would be trained in working machinery, in fitting machinery, and in all those sorts of things, which the other class of men could not have an opportunity of being trained in. The very best underviewers and bailiffs, commercially speaking, are the men who have been raised from the ranks, because they have a perfectly practical knowledge of what a day's wage ought to be for a day's work, a knowledge which the scientific men do not possess. For all those departments, give me men from the ranks; but for the other departments I would have the educated men.

12853. Mr. *Foster.*] These assistant inspectors, then, would not be required to possess any practical knowledge before their appointment as assistant inspectors?—No, not any practical knowledge.

12854. Their duties, in fact, would rather be a school for acquiring a practical knowledge of mining, and of engineering generally?—Yes.

12855. And you would propose that they should be trained to these duties at the public expense?—No, I stated that I did not propose that.

12856. They should be without salary?—Yes, without salary.

12857. Do you think that the owners of the mines of Great Britian would consent to their underground workings becoming the arena for the instruction of a body of these young men?—Yes, I think they would when they thoroughly understood it; I think that so far from objecting to the thing they would very much like it.

12858. Have you had any conversation with owners of collieries on this subject?—I have talked a great deal about these things with many men; I was the person who, with Mr. Nicholas Wood and Mr. Warrington Smythe first propounded the importance of having inspection at all after the great accident at Darley Main, in Yorkshire, and we have discussed the thing over and over again with coal owners.

12859. Have you discussed with them this subject of appointing young men in the way you propose?—No.

12860. My inquiry was entirely about these young men, but you have branched off to the general theory of inspection which is established, and which we all approve of; on this new theory of yours have you had any conversation with the owners of mines as to whether they would approve of the introduction into their collieries of young men without any practical knowledge whatever, who should, under the cloak of inspection, make their visits to the collieries of those owners the means of obtaining a knowledge of mining engineering?—Put in that way, I have not.

12861. Then you have no reason to know that the

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the colliery owners would really allow the admission of such young men into their underground workings?—No.

12862. Do you think that these young men could be trusted to go down a mine without any practical knowledge whatever?—Certainly.

12863. Would they not want the constant attention of the viewers and others connected with the mines during the time that they were below to keep them out of harm's way?—I do not think so at all.

12864. Do you think that they would be competent to go down at any time without assistance?—We will reduce it to a practical point, if you will permit me; I think about half-a-dozen journeys down and long travels in the pit would set all straight for them to ascertain how they must take care to protect themselves from falls, owing to the state of the roof and from danger arising from the lamps, and so on; but I have been endeavouring to show that the class of young men whom I have been suggesting for this purpose would not be likely to give annoyance and to interfere with the management; and I think I stated that I wished to establish a complete authority over these young men on the part of the inspectors, who should be responsible for their acts; interference is the worst of all things in the management of a coal mine.

12865. Would you then wish that these young men should merely accompany the inspector during his visits?—No question they would have to accompany him; but if they always accompanied the inspector during his visits, their services would be nil, and they would be of no use at all. It is with a view of assisting the inspectors and training these young men, so that we should have better men, if possible, for inspectors, that I propounded this idea.

12866. Would there be any means of securing the services of these young men for the public in after life?—No question about it.

12867. Might not they, as pupil-teachers often do, take situations on their own account?—Yes.

12868. Would there be anything to prevent their becoming, when competent, and after having had this instruction, colliery viewers?—Nothing; those are employments open to everyone.

12869. In the event of vacancies not occurring amongst the inspectors, would not these young men naturally look to obtaining certain situations where they would get employment in an independent manner?—I have no doubt they would, and very probably they would be found very useful men in those capacities.

12870. But you have said, I think, that the men raised from the ranks are, generally speaking, the most efficient men for underground purposes?—For the commercial departments of underground purposes; that is to say, the regulation of prices of work and the hours of labour, and that sort of work which does not come within the scientific part.

12871. Then you would wish that these assistant inspectors should be a sort of hybrid genus, partly inspectors and partly pupils?—No, they would necessarily be pupils; but they would simply be assistant inspectors, learning in their way and reporting to the inspector what they found wrong.

12872. And in addition to these, you would have an increased number of inspectors, as I understand you?—Yes, in the fiery district.

12873. Should you not consider that a sufficient number of responsible inspectors would meet the case more completely than introducing a new order of inspection altogether into the mines?—No, I do not think it would; and for this reason, that we cannot secure the assistance of competent men, first-rate men, at the remuneration which inspectors receive.

12874. Do you think there would be any difficulty in getting an increased number of inspectors if Government were inclined to appoint more?—Not if they paid them liberally; there is a broad distinction between men that are really worthy of the post and those that are not. What I want to see is the introduction of regularly trained men who have been trained from boyhood to their duties, and who would thoroughly and practically understand them; not men who go into mining in middle life; those are not the men we want, for they cannot possibly understand the business, yet we very commonly see the thing done.

12875. Mr. *Woods.*] I think you said that you would have an examination for that class of viewers (I have forgotten your exact words) who set up for being viewers, but that for the men who rose from the ranks you would not have an examination?—That is so.

12876. That would constitute two classes of viewers, would it not?—Yes.

12877. I presume that this suggestion of yours involves a Parliamentary restriction that nobody should be employed as a viewer except from these two classes?—No, it does not.

12878. How would you secure the adoption of the system, then?—I say that even a viewer who has not been trained should be a man who has some kind of distinctive rank; he should be rather a superior person to the working men. The difficulty I saw in the way of recommending that all men should have the training was, that we should prevent the men in the ranks from rising because they could not go through the examination, whereas they practically might be equally useful with those who could.

12879. That would constitute two classes of viewers, one class holding a diploma or certificate of merit, and the other class not holding such a certificate?—Yes.

12880. In case the coalowners did not like those who held a certificate, how would you secure their appointment?—That they must take their chance of; because they are examined, it does not follow that they must be employed; they must rest upon their own merits for that.

12881. The Member for South Staffordshire has asked you a good many questions about these young men going down alone, and I understand you to say that the owners of mines would welcome them?—I think so; that is to say, when they understood it thoroughly.

12882. Let us see how it would work. Supposing that one of these young men went down a mine and was killed, because the chain broke, do you think that his widow would be able to bring an action against the owner of the mine for culpable negligence?—No.

12883. Why not?—Because the young man would not be in the service of the coal proprietor; he would not be a paid servant.

12884. But the coal proprietor, I apprehend, according to your plan, by Act of Parliament, would be bound to permit him to go into the mine?—Yes, perhaps so.

12885. Mr.

12885. Mr. *Ayrton.*] Supposing that the owner of the mine were liable to pay compensation to the widow, in the case which has been put to you of the assistant inspector going down to view the mine and meeting with an accident; do you think that the owner of the mine would like to see an assistant inspector going down his mine?—I cannot see the objection to mining supervision, provided it is carried out without interference; anything that insures the better conduct of the mine must be an advantage.

12886. Mr. *Woods.*] Even if it involved the proprietor in additional risk, I understand you to mean?—I do not quite understand what that question has to do with it.

12887. Passing to another subject, are you conversant with section 18 of the Act of 1860, which has reference to the plans that must be produced to the inspector?—Yes.

12888. There is a proviso at the end of that section, which I will read to you: "Provided that nothing herein contained shall be construed to authorise any inspector to make a copy of the whole or any part of a map or plan which shall be produced or made;" are you aware of that proviso?—Yes.

12889. Do you agree with me that the knowledge of a mine, I mean of its peculiarities, is valuable to the owner of it?—Yes.

12890. Do you think, then, that he would want a crowd of strangers coming into it?—There would not be a crowd by my plan.

12891. Do you think he would want a pupil nominated by the inspector coming into it?—I do not think the pupil would do any harm.

12892. Do you think that the owner would desire their presence?—I think he would; I do not think that the fact of their having a sight of the plans could or ought to operate with them.

12893. Do you propose that these assistant inspectors shall have authority to ask for the plans?—I have not considered that question at present.

12894. Do you think their presence would be of any use if they had not?—I think that the pupils would be of more use, probably, if they had that authority; but for the duties that I have defined it would not be necessary for them to have authority to ask for the plans.

12895. Do you think that the owners of mines would like to show their plans to any persons who might ask to see them?—I do not see why they should not, providing it was for the purpose of inspection.

12896. Would it be competent, under your system, for the inspector to appoint the owner of a neighbouring colliery to be his pupil?—No.

12897. Section 8 of the Act is, that "It shall be lawful for one of Her Majesty's principal Secretaries of State from time to time to appoint any fit person or persons to be an inspector or inspectors of coal mines and ironstone mines under this Act, and from time to time to remove any such inspector or inspectors;" does that clause give power to the Secretary of State to appoint even these persons whom you have suggested?—As I understand the clause from hearing it read, it does give that power, because it says, "to appoint any fit person."

12898. Then the existing law already includes the power which you recommend?—I do not recommend additional power; I recommend additional assistants. That clause may or may not be applicable; I do not know about that.

12899. I believe you are the owner or manager of several mines; are any of them explosive?—Yes, very.

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12900. Do you think it would be a thing you would desire, to have a great number of persons coming down those mines, over whom you had no authority yourself?—Yes, of such persons as I have described, to fill the office of assistant inspectors.

12901. You stated that you thought the existing inspectors totally inadequate, and you recommended an addition to their number?—Yes, I meant inadequate as to number, not as to capability.

12902. What is the nature of the duties which you think them inadequate to perform?—I referred to the utter impracticability of their visiting the mines sufficiently often.

12903. Sufficiently often to do what?—To examine the state of the mines; that is to say, the state of the ventilation, the state of the machinery, and the state of the workings.

12904. Would you agree with former witnesses, that the good management of a colliery depends upon observation of it from day to day, and the proper safeguards being resorted to?—Yes; if the witnesses have stated that, I agree with them; but I have not read the evidence.

12905. How often would you think that an inspector ought to visit a mine?—It would depend very much upon the nature and character of the mine, upon its liability to sudden outbursts of explosive gas, and to the general tone of the management of the mine itself. There are some mines, well-managed mines, where it is not necessary for an inspector to attend very frequently. There are other mines where the managers are indifferent, or careless, or stupid, or obstinate, or something else, and want looking after; and there the inspector should go frequently.

12906. I understood you to agree with me, that the Secretary of State for the Home Department already possessed the power to appoint as many inspectors as he thought desirable, and that Parliament would pay their salaries?—Yes; I understand that from the eighth section.

12907. Mr. *Ayrton.*] I suppose it was your view that these young men should be appointed, having had an elementary education in technical matters?—Yes.

12908. And that in the first instance they would accompany the inspector as their master, until they had acquired a certain amount of practical knowledge?—Yes.

12909. And he would delegate to them particular and special duties under his own responsibility, and with his own directions, as they advanced in practical knowledge?—Yes.

12910. And in that way they would aid him in the observation of those particular facts which it was necessary for him to know, in order to form a judgment upon the working of mines; that would be the character of the proceeding, would it not?—Yes.

12911. But you do not propose that these assistants should themselves have the authority of an inspector to do anything by their own motion; in the way of giving orders or directions for the management of the mines, or in the way of discharging the duties of the inspector?—Nothing whatever of that kind.

12912. They would merely, on his responsibility and as he would from time to time instruct them,

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them, obtain accurate information for him, to enable him to perform his duties; that is what you desire, is it not?—Yes.

12913. Mr. *Fawcett.*] Is that part of the Act attended to which relates to children being obliged to read and write, and to their going to school so many hours a week, if employed between 10 and 12 years of age?—It is attended to in a great degree.

12914. But it would be very much better attended to, I suppose, if there were more inspectors, because the inspectors have the right to demand these certificates, have they not?—I believe they have; but I cannot tell at this moment without referring to the Act of Parliament.

12915. Supposing (which is the case) that the inspectors have a right to demand these certificates, do you think that, considering the number of mines which they have to inspect, it is impossible for them to see that the certificates are produced?—Totally; there is so much other work for them to attend to of more importance, they cannot attend to the small details.

12916. Then the fact of there being so few inspectors tends to make the Act not so efficient as it ought to be?—It does to a certain extent, but still there is great attention paid to the Act.

12917. *Chairman.*] Do you think that a competent inspector, by going down a mine, having first looked at the map, may, without going into every corner and separate working, form a very good idea whether or not the mine is worked on a good principle?—Yes; he may travel through one or two districts of the mine and infer, generally, what the character of the management of the mine is; at the same time, there may be a district of the mine not so well managed, and in that district an accident may occur from a door being left open, or some other cause, and loss may ensue, and yet the mine may have been reported as having been in a good state, whereas, in reality, there was a district of it which was in a bad state.

12918. But an inspector would get an idea in the way I have suggested whether it was necessary for him to go to the mine again, would he not?—Yes.

12919. And you think that if inspectors made such visits oftener accidents would be diminished, I suppose?—I think there would then be a better chance of accidents being diminished.

12920. You spoke of fiery mines only requiring an increase of inspection; have you had any experience of black damp mines?—Yes.

12921. Do you think that the inspection is sufficient as to them?—I do not think it is; I think it would be better if we had more inspection in that respect also.

12922. Do you not think that, in one respect, black damp mines require more inspection than others, because they are not liable to those accidents which attract the attention of the public?—Yes; and the effect in the black damp mines is not immediate, but they tend to shorten life. The ventilation apparently does not need to be a strong ventilation; but, notwithstanding that, the noxious gases, particularly where carbonic acid gas prevails, have a tendency to shorten life, no question of it. I know instances of mines where men were old men at 50 years of age; and since the mines have been better ventilated they have lived on to the natural term of life.

12923. Comparing black damp mines with fiery mines, in which should you say the present inspection was most defective?—I think an increase of the present inspection is most needed in fiery mines.

12924. That is on account of the fearfulness of the accidents when they do occur, I suppose?—Yes.

12925. But that is not exactly an answer to the question: in which is the inspection most defective, with reference to the amount of evil and suffering that is to be prevented?—I think it is most defective in the black damp mines.

12926. Has your attention ever been directed to the question of having certificated managers as there are certificated captains of ships?—No.

12927. You know what the system is to which I allude; a captain of a merchant ship must have a certificate, and that certificate is liable to be taken away from him in case of neglect?—Yes.

12928. Do you think it would be desirable to adopt the same system as to the managers of mines?—I do not think it is necessary to do it.

12929. You have not directed your attention to that subject, perhaps?—I have not thought very much about that.

12930. Mr. *Liddell.*] These young men of whom you have spoken could, in the course of their training, obtain a very close and intimate acquaintance with the affairs of each colliery, would they not?—No; the only information they could obtain (and that would be information given them by the workmen themselves,) would be on questions of wages; they might obtain that by asking the question, but they could not obtain information as to the real state of affairs at the colliery.

12931. They would necessarily be in a position to inform themselves very accurately of the amount of coal worked, would they not?—Yes.

12932. They might know the amount of output to a ton?—Yes.

12933. And, consequently, the amount of business done in the course of a year?—Yes, and all that is published at present.

12934. That information is published in the aggregate, I believe, but not in detail?—In the aggregate.

12935. These men would have, therefore, a very accurate knowledge of the position of each colliery in which they had been engaged?—They could have it by searching for it.

12936. And in the event of their obtaining situations on their own account, in after-life they might, if they thought proper, use that information very much to the prejudice of the colliery owner?—I do not think that at all; there is a certain class of information which they could not acquire, namely, the commercial part of the information.

12937. They would make a very good guess at it, perhaps?—They would know perfectly well what the cost of hewing coal, and the cost of putting coal to bank was, and they might learn the royalty, but they could not tell what the commercial result was.

12938. Would they not be in a position to make a very tolerably accurate guess at it?—They might make a guess, but they could not make one which any other person, in competition in the trade, could not make just as well.

12939. I want to know whether you would think it desirable that there should be persons seeking for situations as colliery viewers possessed of that amount of information which they could

could use, if they thought fit, to the prejudice of other persons engaged in the trade?—They could get that information, but if you prevent that, that is to say, if men are not allowed to do anything of the kind, you put an end to training altogether. Take, for instance, the other class of men that I have mentioned, young men who are being trained under engineers, as their pupils; they know all this; they are trained far more than a sub-inspector would be trained, and they go out into the world, and we do not hear of any betrayal of trust on their part.

12940. Mr. *Fawcett.*] You knew these things yourself, I suppose, when you were being trained?—Yes.

12941. Mr. *Liddell.*] Then it is not your opinion that any prejudicial results would arise from the possession by these young men of this knowledge?—Most certainly not.

12942. Are mining engineers educated and trained now in the way that you propose that these young men should be trained, namely, by going down the pit and acquainting themselves with the practical working of it?—Yes, and with additional information, which I do not propose to give to these assistants.

12943. Are any of these mining engineers so trained without being actually in the employment of the particular colliery?—Numbers.

12944. Mr. *Ayrton.*] In point of fact, would the information that these assistant inspectors would get, be of a character that could be injurious to the owner of the mine?—Not at all.

12945. The information that they would get, though merely examining particular modes of working, would not be of such a character that they could use it to the prejudice of the owner of the mine?—Nothing could be done by them in that way; they could get no information that could not be obtained if persons were desirous of having it through some other channel; people can always get information, unfortunately, by buying it, without getting it from these young men of whom I am speaking.

12946. Mr. *Liddell.*] Supposing the inspectors to employ these men upon their own responsibility, would you give them the power of employing an unlimited number?—Certainly not.

12947. You would define the number?—One or two in a district; two would be the very limit.

12948. General *Dunne.*] What is the character of the information that might be considered injurious to the possessor of a mine?—It might be considered injurious, for instance, if information were conveyed as to the position of certain workings, as to a man working near to a boundary, or as to a man taking coal improperly, or other things of that sort; beyond that I know of nothing.

12949. Then, in fact, it would be only information of a man doing what he ought not to do?—Precisely so; or this perhaps might happen: in the event of some man wanting to sell his colliery, and representing that it was a very valuable current going colliery, with a great many acres of coal to work, the man to whom he makes these representations goes to one of these young men, and finds from him that it is not a valuable colliery, and that it has not a great many acres of coal to work; but that is a thing that every prudent man would find out from a legitimate channel.

12950. Then, in fact, there is no information of that kind which it would be of the slightest impropriety to give?—Just so.

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12951. Mr. *Woods.*] Could not that information be so given, purporting to be from official sources or *quasi*-official sources; would it not come, in fact, as if it were given from official or *quasi*-official sources?—Not without the party giving information doing wrong.

12952. I think you have said that generally you thought it would not be an undue interference with private affairs?—Yes, that is my opinion.

12953. And you referred to the fact that the viewer is now allowed to take his pupils down the pits?—Yes.

12954. But the viewer who takes his pupils down, is a viewer selected by the owner of the colliery, I apprehend?—Yes.

12955. And he is not a person imposed upon the owner of the colliery by Act of Parliament?—No.

12956. And therefore, practically, the pupils selected by him may be said to be selected by the owner of the colliery?—Yes, so far as that goes.

12957. Do you know that the Honourable Member for Dudley introduced an Act, which was much opposed by the coal-owners, for giving the power to a justice of the peace in petty sessions to issue a search warrant for the inspection of mines?—No, I do not.

12958. Then, probably, you do not know that it was opposed, because it was thought that it would afford a means for any person in the neighbourhood visiting a mine against the will of the owner?—No, I am not aware of that.

12959. Do you think that the operation of the Act for the inspection of mines is working so as to improve the condition of mines?—I am quite sure it is.

12960. *Chairman.*] With reference to the inspection, I understand you to say that you are not aware of any case in which the knowledge acquired by these assistant inspectors could be used to the prejudice of the owner of the mine, unless it was in the case where that owner meant to take an unfair advantage of the ignorance of other people?—That is so.

12961. Mr. *Foster.*] Supposing that a mine-owner has introduced an improvement in his colliery, or is carrying out an improvement which perhaps he does not wish all his neighbours to know, according to your suggestion might not a young man, without great years over his head to give him discretion, and without any direct responsibility, but in a state of pupilage, from his connection with the inspector, demand entrance into that owner's works at any time; and might he not convey information to a neighbouring coal-owner, or one of his agents, contrary to the wish and knowledge of the owner of the mine, and without any unjust act having been committed by the owner of the mine?—I understand that question to mean this, in fact; that supposing I were working out some invention or great improvement in my mine, should I not object to information of that improvement being conveyed through this channel to my competitors; undoubtedly there would be a danger of it if that were so.

12962. Mr. *Fawcett.*] You have had great experience, and I will therefore put you a question upon that point; have you known, from your practical knowledge, a case where an owner has

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has been able to keep any improvement secret?—None at all; but my experience is this, that when we get hold of an improvement we are too happy to publish it, and to get it adopted. I will quote the instance of the coal-cutting machine, attention to which is called in every direction, to reduce the cost of the holeing, or undermining in the seams of coal. If that could be confined to one colliery, and no one else could get the information, it would be a very grand thing for that coalowner; but so far from that, it is totally impossible to confine it, and therefore the invention is published throughout the kingdom.

12963. Mr. *Foster.*] But if a new machine were being used in a colliery it might be with a view of taking out a patent for that machine?—Yes, it might.

12964. Would it be convenient to the colliery owner to have at all times that machine, pending its perfection, open to the inspection of one of these young men entering the mine at any time he thought convenient to do so?—That certainly would not be convenient, and the coalowner would have a perfect right to put a lock upon that part of the mine and say, "I am perfecting a machine, and shall exclude you from that part of the mine; in the meantime taking upon myself the responsibility, as colliery owner, of any accidents that may occur in that part of the mine during that period for which I exclude you."

12965. Mr. *Liddell.*] Is it your idea that the visits of these men to any colliery should be unrestricted, or do you propose that those visits should only be made with the permission of the coalowner?—Under the direction of the inspector, I should propose.

12966. Then you anticipate that they would only require to be armed with the authority of the inspector to enter any mine?—Yes; and without his authority they should not enter.

12967. But it should not require the sanction or the consent of the coalowner, in your view?—No.

Mr. Edward Jones, called in; and Examined.

Mr. *E. Jones.*

12968. Mr. *Liddell.*] You are Mining Engineer and Manager of the Lilleshall Collieries, in Shropshire, are you not?—Yes.

12969. How many people do you employ?—About 5,000.

12970. Are you a guardian of the Shiffnal and Newport Union?—Yes; I have been so for 25 years.

12971. You employ a large number of women and girls, I believe?—We employ 582 just now.

12972. Of what age are they chiefly?—From 11 up to 20 years of age.

12973. What proportion of them are married women?—Not more than 40 in the total number.

12974. Will you give the Committee some information as to the moral condition of these women?—Considering the large number employed, I consider their moral condition good. I can speak on the subject from having been a guardian of the union for these last 25 years, and as a general rule we get many more cases of immoral women in the district from the agricultural class than from the collieries.

12975. Do the women associate with the men much when they are at work?—Not at all.

12976. Mr. *Ayrton.*] In what does the work of the women consist?—They take the coal from the pit to the screens at the coal-pits; and at the iron-pits they pick the ironstone out of the débris at the end of the mount; then the same people carry that from the mount's end, after they have picked the stone out of the débris, to the rank. In other cases they put it to the rank at once, because there comes up no débris with it.

12977. They drive the trams, do they not?—They generally draw them, assisted by one man, the banksman.

12978. Do they kneel down to pick the coal or ironstone when they do that work?—They kneel down and pick it, and carry it in iron boxes to the rank, and then it is put up in ranks until it is required to go to the furnaces for consumption.

12979. Are those the only duties which they perform?—Those are the only duties.

12980. How many hours a-day do they work?—Ten, upon an average.

12981. Beginning at what time?—They begin at six, and work till five, and we allow one hour out for dinner and breakfast, or 20 minutes for lunch, and 40 minutes for dinner. All the ironstone pits stand for the 20 minutes and the 40 minutes. The coal-pits do not stand, but there are parties sent to do the work of these people while they get their dinner.

12982. Mr. *Liddell.*] At what age are they usually married?—At 18 or 20; there are a few who are married under 18, but very few.

12983. I believe it is the case that no great number of the women remain on the pit bank after they are married?—Very few indeed; the moment they marry they usually get to housekeeping.

12984. As to their physical condition, are they healthy women?—Very healthy women, and very strong women.

12985. Are you able to say whether they prefer this outdoor labour to indoor service?—They do prefer it, because of the liberty which they have under it. I have spoken to several women who have been in service, and they have told me that they preferred to come back to the pit, on account of being kept to very hard work in farm-houses, beginning very early in the morning, and going on till late at night.

12986. I presume, however, that the work in the farm-houses is not so hard as the work upon the pit bank?—I should say that it was as hard.

12987. However that may be, you say that the women do prefer the pit work?—Yes.

12988. Would it be a popular step with the population with which you are acquainted, if the Legislature were to interfere, to prohibit by statute the employment of women in this way?—It would not be popular, and it would be considered very undesirable; in fact, we should not have people to fall back upon to do the work, if they are not allowed to do it; 582 is a large number to be employed in one work, and boys are very scarce.

12989. *Chairman.*] From what work do those men come who take the work of the women during their dinner-time?—Those are the men employed by the charter-master. The bulk of the charter-masters keep men to drive the horses in their employment,

employment, and they bring these people to work while the women get their dinner.

12990. They are men living in the immediate neighbourhood, I suppose?—Yes.

12991. If you put those men on to fill up the time when women do not work, could you not put on the same number or the same class of men to fill up the time when boys might be taken off work?—No.

12992. Mr. *Ayrton.*] You say, as I understand you, that you could not do without the women?—We could not do without the women at present.

12993. What is the practical result of using women instead of men; I suppose it is that you pay less wages?—But we could not get the necessary number of men, to begin with.

12994. Do you mean that, even if you paid more wages, you could not get men in sufficient numbers to do the work?—I do not think we could.

12995. Would not the only difference be that you would be paying the wages of men instead of the wages of women?—If the women were to be discontinued that would be the result; if men could be got the wages we should have to pay would be more.

12996. How much per cent. more do you suppose you could then have to pay in wages?—Thirty or 40 per cent. more for that class of work.

12997. What would be the actual expense on the collieries which you are acquainted with?—It would be very serious.

12998. The number of women which you have given us is about 10 per cent. upon the number of men that you employ?—Yes; but a great part of the men are employed at the furnaces and the iron work.

12999. The effect of employing men instead of women would be to add in wages 40 per cent. to 10 per cent. of the number employed by you?—Yes; it would be very considerable upon a month's wages.

13000. Practically, that would be the result, would it?—Yes.

13001. Could youths do the work of those women?—No, they could not do it.

13002. Could elderly men do the work of those women?—No, elderly men could not do it.

13003. Therefore you would have to choose between adult men and women?—Yes.

13004. Mr. *Foster.*] Though the work of picking the ironstone is light work, it requires quickness and aptitude, does it not?—It requires quickness and aptitude, and it requires strength also.

13005. The boys could not be depended upon to do that work, as I understand you?—I should say not; they would run about the ends of the mounts, and there would be no keeping them within bounds.

13006. You are aware that the ironstone of the district is a great deal of it very small, and requires a great deal of care in knocking it out?—Yes.

13007. What is the size of the stones?—They are nodules of two inches up to six inches, I should say.

13008. And it requires considerable care in the knocking out?—Yes, with little hammers, and putting it in the box as it goes on.

13009. And that is an employment to which I presume women are particularly well adapted?—Yes.

13010. Would it not create almost a panic in the Shropshire district, if it were known that an Act of the Legislature was about to prohibit the employment of women about pits' mouths and collieries?—It would.

13011. Mr. *Ayrton.*] How many women are employed in hauling the trams, and how many in sorting the ironstone and coal?—Eighty per cent. of the gross number are employed in picking out the ironstone, and so on.

13012. And the other 20 per cent. are employed how?—In drawing it from the pits to the mouth's end.

13013. Therefore the objectionable labour at the pit's mouth is limited only to one-fifth of the whole body of women?—Yes; and we have one man to assist two women to lift all the material.

13014. Mr. *Fawcett.*] What is the state of education among these women?—I should say that it is pretty good now.

13015. Can half of them read and write?—At least half of them can read and write; there are a large number of schools in the neighbourhood, and we encourage all the girls and boys to go to the schools.

13016. Are you speaking now of night schools, or of day schools?—Of day schools.

13017. How can they go to the day schools if they are working 10 hours a day?—They go to school before they are 11 years old.

13018. Do not you employ them before the age of 11?—I do not know any under 11, and we employ very few under the age of 14; we encourage the night schools, and we encourage the girls to go to them.

13019. Is the state of education amongst these girls quite as good or better than amongst the boys of the same age?—Quite as good.

13020. Mr. *Ayrton.*] Are the women who are employed in dragging the trams in any way separate as a class from the women who are employed in sorting out the material?—No, they are the same class of people; but we pick out the strongest women to draw the trams.

13021. Are these people who have been bred up in the neigbourhood, or have they been brought in from the agricultural districts?—They are bred up in the neighbourhood.

13022. Mr. *Foster.*] Should you say, from your knowledge, that the Shropshire works employ a larger number of women than the works in Staffordshire?—I should say they did.

13023. Can you tell us whether the Shropshire collier's wife or the Staffordshire collier's wife is supposed to be the most thrifty helpmate to her husband?—I should say the Shropshire collier's wife; I know the Staffordshire women very well, from having had the management of Lord Granville's works at Shelton for two years, and I found the women very inferior there.

13024. *Chairman.*] What is the lowest age at which you begin to employ children?—Eleven is the age for girls and 12 for boys.

13025. Mr. *Ayrton.*] I understand you to say that the girls are entirely employed in assisting to sort the material, and not in any other occupation?—No.

13026. *Chairman.*] You think, as I understand you, that little girls are more careful and more to be depended upon for this work than little boys?—I think so.

13027. Mr. *Foster.*] I think you have stated that you are connected directly and indirectly

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with the employment of about 5,000 people?—Yes.

13028. The collieries of the Lilleshall Company are very extensive, are they not?—Yes.

13029. I believe that Lord Granville is one of the chief proprietors of those collieries?—He is the principal owner.

13030. Will you have the kindness to state what would be the feeling amongst the owners, managers, and charter-masters of the Shropshire collieries, if young men were brought down the mines, as to some extent pupils, for the purpose of learning mining engineering?—It would be very objectionable, and would lead to a deal of confusion.

13031. Mr. *Ayrton.*] Do you think that there would be any difficulty in one of the Government inspectors having an assistant with him to aid him in making his observations upon the state of the mine?—I should strongly object to it myself, and I believe the owners would; in fact, I am sure they would.

13032. Mr. *Foster.*] In the event of such a system being carried out, would you say that the pupils should in all cases be accompanied by the inspector, and that only when in company with the inspector they should be allowed to descend the mines?—Yes.

13033. Mr. *Ayrton.*] But would you object to the pupils going down in company with the inspector?—I should object to it myself, and I should say that it would lead to a great deal of insubordination between the men and myself; even the present system does lead to that, because the men write anonymous letters to the inspector and bring him down when they are on strike, and that creates an unpleasantness.

13034. Mr. *Woods.*] With the fact of an increased number of persons being authorised to visit your mines, who would thus have an opportunity of obtaining information of the details of your mines, be an objection to that system in your view?—Yes, it would be a great objection, and in my opinion it would not be at all necessary.

13035. Do you agree with me that the knowledge of a mine is in itself a property?—It is.

13036. In other words, there is a value attaching to that knowledge of a particular mine which belongs to the owner of the mine?—Yes, no doubt.

Friday, 6th July 1866.

MEMBERS PRESENT:

Mr. Ayrton.	Mr. Liddell.
General Dunne.	Mr. Neate.
Mr. Fawcett.	Mr. Powell.
Mr. Wm. Orme Foster.	Mr. Woods.
Mr. Kinnaird.	

CHARLES NEATE, Esq., IN THE CHAIR.

Mr. EDWARD JONES, again called in; and further Examined.

13037. *Chairman.*] UPON what point do you wish to give further evidence to the Committee?—With regard to the 592 women of whom I spoke yesterday, I may say that I called a few of them together a month ago, and I put this question to them: in the event of Parliament making any difference in their mode of employment, what did they suppose they would have to do. They would not only be thrown out of their present chances, was the reply I got, but they should be driven to do what they should be sorry to do; a great number of them are up here now working in the fruit gardens; they come up periodically to pick fruit, and they see a deal of the world from time to time; they told me that they might go wrong if they were thrown out of their employment.

13038. How do you supply their place when they go away?—Men are got out of the pit to do their work, and less coal is got during that time.

13039. And you have to pay the men more, I suppose?—We pay the men half-a-crown a-day.

13040. Are they willing to come out of the pit?—It is understood that they do come during that time; they have a little pocket money given them as well.

13041. Mr. *Foster.*] Is it a portion only, or the whole of the women, who come to the gardens?—About 50 or 60 of the 592 come up from our women, I should say, every year, to pick fruit in the London gardens.

13042. Then it does not altogether displace the female labour?—No; they just settle amongst themselves who is to come up.

13043. They do it for the change, I suppose?—Yes; they like the change, and they said to me, that they had these opportunities of going wrong, and if they were all thrown out of employment the chances were that many of them might go wrong.

13044. Mr. *Woods.*] What is the inducement which brings them to the London gardens?—Change.

13045. Do they get more money?—A little more money, and see the world; but they work very much harder than they do when at home. I may remark, in regard to the education of these girls, that the master, and other private gentlemen in the neighbourhood, to induce them to remain at school after 12 and 13 years of age, give them prizes every year. They are taught to knit, to sew, and to make a shirt, or what not.

13046. Mr. *Liddell.*] Is this a regular prize scheme?—It is.

13047. Is it established for the whole county?—Yes, it is established for the whole county; we give so many pounds, and other owners give so many pounds, and others give in materials or in Bibles. I may say that there is every care taken over the girls to induce them to remain at school as long as the boys. The women, on the occasion to which I have referred, went on to say, that it would be cruel to prevent them from following that course of employment which they had been brought up to and liked, and were well paid for.

13048. *Chairman.*] The certificate rule does not apply to girls?—It does not.

13049. Do you see any objection to its being extended to girls?—I do not.

13050. You do employ them under the age of 12, I believe?—There are a few girls under 12; certainly not more than 20 out of the lot; they are principally young women from 16 to 20.

13051. But you have no objection to certificates being required of them?—No.

13052. Mr. *Liddell.*] Do you know a man of the name of Enoch Onions?—I do.

13053. You are aware that he gave evidence before this Committee?—Yes.

13054. And that he stated in the course of that evidence that he himself had not been summoned as a witness, but that a man of the name of Edward Beard, of Smethcott, near Wellington, had been summoned?—Priory Lee, near Wellington; Smethcott is in Staffordshire.

13055. Do you know Edward Beard?—I do know him very well.

13056. He said when he received the summons, that he durst not attend, and his explanation of that was, "that he had a wife and family depending upon him, and he knew full well that if he attended this Committee, and gave evidence here, he would be discharged;" I want to ask whether you are aware that that evidence was given by Onions, and whether you have any explanation to offer?—I am aware that it was given. I should be very sorry, under the circumstances, to discharge a man like Beard, or anybody else who chose to come up here and give evidence. I am quite aware that the Committee want to elicit

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the best information they can, and I, as the manager of the works, should only have been too happy if he had come to me to have sent him up. The facts are these: Beard misbehaved himself four years ago, and I suspended him; I might have sent him away altogether; he was working at that time not under a charter master, but by contract, and owing to the insubordination of the men, that is to say, owing to the misconduct of Beard and others, the whole of that pit was upset. It was the only pit that we had then working directly ourselves with the men. There were no middle men there; it was fitted up on the best possible principles with regard to ventilation and everything else, and I had the most scientific men down to examine it, and noblemen have been down that pit; Prince Edward of Saxe-Weimar and the Duke of Sutherland saw it; I may say here that the men worked that pit for a little over 12 months, and during that period they rebelled twice.

13057. Mr. *Fawcett.*] In what way did they rebel?—They were dissatisfied with what they were earning, and yet at the same time they were getting from 10 to 15 per cent. more than the people in the works generally. They reduced their own hours of labour from ten to nine hours a day, just to suit their own convenience, and we quietly gave way to that. They then wanted us to reduce the hours of labour to eight, and asked for an advance of 2 *d.* a ton upon the cutting price; I said, "No, I shall not give it; we cannot afford to give it."

13058. Mr. *Liddell.*] Did they strike?—They did strike immediately, and the work was shut for nearly a twelvemonth, to our very serious loss.

13059. But notwithstanding these circumstances, did you take Beard back again to your employment, and is he still in your employment?—Yes.

13060. Mr. *Fawcett.*] Beard, you have said, was guilty of misconduct, but that misconduct, as far as I understand, simply consisted in his being a rather prominent man in getting up a strike; he was not dishonest, or anything like that, was he?—He was not dishonest, but he was very prominent in getting up the strikes.

13061. That is what his misconduct consisted in?—Yes; at the same time they were doing well.

13062. But leaving that out of the question, was he guilty of any other misconduct besides getting up the strike?—No; and he was simply suspended, and allowed to work afterwards with one of the contractors.

13063. *Chairman.*] When you say that he and his fellows were allowed to receive 10 or 15 per cent. more than the people in the works generally, was it for the same sort of work?—It was; for they were working directly through me, and not through a contractor. I found horses, and timber, and candles, and the women on the bank, and so on.

13064. They found it more advantageous to work directly for you than to work under a contractor?—Yes.

13065. Then, I suppose that the men lose something by working under a contractor; at least, they do not get so much when they work under a contractor as when they work directly?—At times they may, and they do, because the bulk of the work under the contractor is stint work, and 25 per cent. of the gross number of men employed go down at six and are out at 11 o'clock for a day's work. I myself have done it in 4½ hours when I was a youth.

13066. Were you ever a working miner?—I did work for some six or nine months under Mr. Foster, at Stourbridge. I was brought up in his works with my father.

13067. You went to learn more than to earn, I suppose?—Yes.

13068. And then you did not stay down yourself more than 4½ hours?—I myself in 4½ hours did a day's work; a stint, so many yards to so much money.

13069. Was not a day's work at that time more than 4½ hours?—No. Some men would come up at 11 or 12, or 1 o'clock, the inferior set; but I have seen good men do it in four hours.

13070. How long were the boys kept down the pit at that time?—It was a different department; I am speaking now of holers.

13071. Or hewers?—Yes.

13072. What at that time was the ordinary time for the boys to stay?—At that time 11 hours.

13073. Were there two shifts of men?—No.

13074. Why was it necessary for the boys to stay 11 hours if the men only worked about five?—They were in different departments. The holers would remain and do a certain number of yards for so much money; then they were followed by the getters that get the coal and the fillers that fill the coal, and the fillers would remain probably 10 hours, and the boys would have to remain with them as long as they remained.

13075. Mr. *Foster.*] The men would have an opportunity of doing the work of a day and a-half in the day, I suppose?—Yes.

13076. It did not follow that they would come up at the end of their day's stint?—No. Many of them would do a day and a-half, and do that now.

13077. *Chairman.*] Was there any limit put to the amount of coal that they were to cut?—The number of yards varied from 6 to 13 as the stint at that time, and when they had worked that they might please themselves whether they remained longer. The same custom prevails now as prevailed then.

13078. By stint, you mean that if they did not do that much work you looked upon them as bad workmen, and would not keep them in your employ, I suppose?—I would not say that; but, in fact, they are not satisfied if they cannot do the stint in six hours now.

13079. Then the stint is fixed by the employer or the manager, who says, "You are to cut so much coal; take your own time to do it"?—Yes.

13080. And if you had workmen who habitually did not cut so much coal as that, you would look upon them as bad workmen, and would be glad to get rid of them, would you not?—I cannot say that we should be glad to get rid of them, because there is a scarcity of labour. In fact, now when men get advanced in years they do half or three parts of a day; an old man will often do three parts of a day, because he is physically unable to do more.

13081. Mr. *Foster.*] The stint varies, you have said?—From 6 to 13 yards.

13082. How much in?—One yard in it varies according to the different degrees of hardness.

13083. Mr. *Liddell.*] Onions states a little further on, in answer to Question 5673, that he

was

was also discharged, but he did not know for what reason; will you state, as a matter of fact, the reason why he was discharged?—He was not discharged. Four years ago (in April 1862) he was a contractor under the company, that is to say, a charter master with another getting iron-stone. He failed to carry out that contract; he also kept a shop, and other parties kept public houses contrary to the rules of the office, and I said, "If you people do not discontinue these shops and public houses you certainly must go; I am sorry to part with old workmen, but it is my duty to say so."

13084. Is the keeping of shops and public houses an infraction of the bye-laws of the company?—It is.

13085. Will you explain to the Committee why the keeping of a shop or a beer-house is objected to, and made the subject of a regulation by the company?—For this reason, a man that owns a public-house takes all his men from the pit, and pays them in the public-house, and gets those men to drink one, two, or three quarts of beer to their serious injury.

13086. Then it leads indirectly to a species of truck?—It does; at this time I have a contractor who is employing 200 hands. Now, if he kept a shop it would be natural for those people to go to his shop and get their food; this man, Onions, kept a shop in one of our cottages. I suppose he found out that he could get a living by keeping the shop in the town, and he went into the town of St. George's, and keeps a shop there to this day.

13087. Is it the general rule among the colliery owners in that district to make the keeping of a shop, or a beer-house a matter of regulation, and to stop that practice?—It is; we do not allow them.

13088. And it is perfectly understood by the workmen that it is not allowed?—It is.

13089. *Chairman.*] Does this prohibition extend whether the shop is in one of your houses or in a house in the town?—It is not material whether it is a house in the town or one of our own. We do not wish the men to be imposed upon.

13090. Mr. *Fawcett.*] You always take care to acquaint these charter men, I suppose, of the existence of this bye-law before you employ them?—I always tell them that it is a point of the contract; I want to protect the working men from injury, and that is why it is made part of the contract.

13091. Mr. *Liddell.*] Onions mentions the case of a boy who was killed upon the spot about three months previous to the time when he gave his evidence; I believe you wish to explain the circumstances under which that boy lost his life. Onions stated that a lump of stone dropped "out of the shaft upon the boy's head, which killed him upon the spot;" is that correct?—I believe it is, but the boy was in the bottom of the shaft; he was where he ought not to be; his father was the contractor for the pit, and told the boy not to come in the bottom at all. When the basket came down it was his duty to stand inside the inset from the pit.

13092. If the boy had been where he ought to have been, this unfortunate accident would not have occurred?—No; and his father had cautioned him several times; he had found him in the bottom several times before, and this time, when the boy was there, a lump of rock fell from the shaft.

13093. Then the poor boy paid very dearly for his carelessness?—He did; I was very sorry for it, but the lad had no business there, and you cannot guard against these things as managers.

13094. *Chairman.*] Mr. Onions attributes the fall of that stone to the fact of the shaft having been imperfectly lined. In answer to Question 5835, he says, that "It was lined with brick, but it was imperfectly lined; it must have been so." Do you admit the truth of that description of the shaft?—The custom of the country 40 and 50 years ago was that the coal seams and the very hard rocks were left unbricked. This was one of the old shafts; but, nevertheless it was an excellent repair, for I had people kept that go down periodically to examine the shaft independently of a contractor. In this shaft there was a seam of hard rock left unbricked; but, at the present time, in my new sinkings, whether coal, rock, or anything else, I have them all bricked.

13095. Then Onions states correctly the circumstances under which the piece of stone or rock fell out, does he not?—It may have fallen from that particular rock, and it may have fallen from the top; that is to say, it may have been on the side of the rail, and fallen in.

13096. For anything you know, he states correctly the nature of the lining of the shaft?—The shaft was perfectly lined, except that one piece of rock. I sent people down immediately after the accident, and they found the shaft all right and good.

13097. Mr. *Liddell.*] Mr. Onions stated, in answer to Question 5837, that the baskets are drawn up by single chains; is that so, or not?—We have no single chains in the work; they are all two, three, and four linked chains, according to the depth and the work they have to do; in fact, men would not go down with single chains.

13098. Does a definite meaning attach to the term "a single linked chain"?—Yes; and we have none working in the county, I believe.

13099. The Act prohibits the use of single-linked chains, does it not?—It does.

13100. And you comply with the terms of the Act by using stronger ones?—Yes; and independently of the Act, I should not use single-linked chains.

13101. *Chairman.*] Do you believe that there is an idea among the workmen that, if they came up to give evidence before this Committee, it would be remembered against them on the occasion of their committing any fault?—I do not think so; and I am quite clear upon that point.

13102. I do not ask whether you would actually remember it against them, but I ask whether there is an idea amongst them that it would be so?—I do not think there is; I am pretty sure there is not.

13103. Mr. *Liddell.*] You admit, I imagine, to the full, the right of the workmen to combine for their own benefit, or to take any steps that they may think fit to secure a due attendance to their interests by Parliament, or otherwise?—I should say that that is clear.

13104. And I understand you to say that, upon any application having been made to you by any workman to come here to give evidence, you would have given him every facility for doing so?—With a deal of pleasure, and I would have paid his expenses up. I have one other remark to make, and that has reference to the assistant-inspectors; the more I think of it, the more I am

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satisfied that to send assistant inspectors into any of our pits would cause great confusion.

13105. Did you hear the evidence given here yesterday by Mr. Woodhouse on the subject of training assistant inspectors?—I did.

13106. Do you agree in the plan that he proposed?—I do not.

13107. Will you state your objections to it shortly?—It would lead, I am satisfied, in my own country to a deal of confusion and insubordination; and, moreover, those pupils would be learning a valuable business at the expense of the owners and lessees, and might, at some future period, use that knowledge against them.

13108. Speaking on behalf of the owners, do you think that they would really assent to such a plan?—I should say they would not, under any circumstances, assent to it; I can speak for Lord Granville and the people acting with him at Lilleshall. If you want more inspectors, I would say: take them from the best practical men you can get, men trained in the mines, and men that know the mode of work in the district you are going to appoint them to.

13109. Is there anything in the Act of Parliament to prevent the Government from employing any number of additional inspectors they think fit?—No.

13110. Mr. *Fawcett.*] You say that the owners would object to these assistant inspectors; have they not objected to every piece of legislation with reference to coal mines?—No.

13111. Did they not object to any restrictions being placed on the employment of the boys?—Not in my district.

13112. Not at the time of the Select Committee on the subject?—No; I took the statistics immediately the Act came out, and to my own surprise, out of 160 boys, I only found three under 12 years of age, employed on the Lilleshall Works.

13113. You think that these assistant inspectors would produce great inconvenience?—Yes.

13314. Do you know how many Mr. Woodhouse proposed?—Six or eight, or ten, I believe.

13115. He spoke of one to each inspector. There being only one assistant inspector in a district it could not produce any great amount of inconvenience to one colliery owner in particular, could it?—Yes; the fact is this,—that the men, and the contractors themselves, who ought to know better, will go and tittle-tattle to the inspector, and tell him what they will not tell me, and they write anonymous letters to him now, containing many things not founded upon truth, whereas if they would come to me the thing would be set right at once. With assistant inspectors we should be in constant confusion. Who would be the manager of a large work like Lilleshall? I should be sorry to be, with these fellows coming in.

13116. I think you are rather assuming that they would be there very frequently, but they could not visit your colliery constantly if there were only one assistant inspector to visit the whole district, I suppose?—My opinion is, that the thing is not at all necessary.

13117. Do you think then that the mines are sufficiently inspected?—I do think so. Unless you very greatly increase the output of coal in England I think you have enough inspection already.

13118. You disagree then with Mr. Woodhouse?—Altogether. We have any quantity of hydrogen in our works, and of choke-damp too. There is much greater difficulty in dealing with the carbonic acid gas than with the hydrogen gas. A case in point occurred last week; we could not work, owing to the carbonic acid gas, though a horse could run from pit to pit; the gas even damped out the air furnace in the night, when the man was not there to attend to it, and we nearly lost all the horses in the mine.

13119. Mr. *Foster.*] Was that owing to the state of the atmosphere?—Yes; and singular to say, immediately below, there was a seam of coal six feet thick, and, immediately above, a seam of coal six feet thick.

13120. Mr. *Liddell.*] What is the whole depth of the mine?—One hundred and sixty yards in this case.

13121. Mr. *Fawcett.*] Has not Mr. Woodhouse a great reputation throughout the country for his practical knowledge of mines?—He is a member of our institute, and I have met him there from time to time.

13122. Will you state whether you have previously heard of Mr. Woodhouse as a man with great practical knowledge of mines?—I have heard of him for many years.

13123. As a man of great mining experience?—In his own district.

13124. And, besides that, he is also an owner, is he not?—I cannot say Mr. Woodhouse spoke of fiery mines; now, I should say, if you want to manage fiery mines well, employ a good practical mining engineer, because a fiery mine is a thing that needs attention every day, and there are minutiæ which you cannot have an inspector attending to.

13125. *Chairman.*] You think that the choke-damp mines require inspection quite as much, if not more, than the fiery mines?—That is my experience.

13126. If the inspectors are not to receive communications from the workmen, and if they are not to visit the mines very frequently themselves without being asked to come, how are they to get information as to the state of the mines?—They do get information from the men.

13127. But you objected, just now, to the men giving them information, and said that you thought it better for the men to come to you than to write to the inspector?—I was alluding then to the assistant inspectors.

13128. You said that they tittle-tattled now a great deal, and that they had communications which they need not have with the inspector; you said that very much more mischief and inconvenience would arise if, besides the regular inspector, there was an assistant inspector, but I distinctly understood you to object to the communications from the men to the inspector?—Not to the present inspector.

13129. You referred to their writing letters to him, which you thought they should not write?—The fact is that the inspector came over to visit the spot, and he found that what they wrote him was not true.

13130. You would not object to their writing to him, if what they said was always true?—Certainly not, if it was always true; I am only too happy to see the inspector myself.

13131. Have you been manager, or concerned in the management of any mine where any engineering pupils, like those Mr. Woodhouse spoke of, have been allowed to come down, because Mr. Woodhouse

Woodhouse said that he himself had pupils who went down by permission?—They do that in my own neighbourhood.

13132. You have known then of mines where engineering pupils are allowed to go down by the permission of the owners?—Certainly.

13133. Have you known or heard people speak of any inconvenience arising from these engineering pupils being allowed to go down?—I am not aware of any.

13134. Mr. *Woods.*] The pupils of any viewer who came to your colliery or any other, of course could be forbidden access by the owner of the colliery under present circumstances?—The pupils I could forbid, but we covenant in our leases to allow the lessor's surveyor to come down.

13135. Confining yourself however to pupils, you could forbid the pupils coming down if you liked?—We could.

13136. Then your objection, I apprehend, would be to having it imposed upon you by Act of Parliament, that you should receive inspector's pupils; you would object to that, as the owner of a mine?—I should most strongly.

13137. Mr. *Foster.*] Do you suppose that such a system would be tolerated by the masters for a moment?—I should say not; such pupils should not go down a colliery of mine.

13138. Mr. *Woods.*] I apprehend that your objection is to the compulsory introduction of any persons into your mine, those persons being authorised to visit it by a less authority than the Secretary of State; you object to the inspector's deputies coming down?—I do.

13139. Or pupils?—Or pupils; I should do all I could to resist them, at least.

13140. But you have not any personal objection, as the owner of a mine, to receive the visits of the regularly appointed inspector?—Certainly not; I am always very happy to see him.

JAMES ROBERTSON, Esq., called in; and Examined.

13141. Mr. *Liddell.*] YOU are a Coal-master. I believe, and the owner of Blairdardie Colliery, in Dumbartonshire?—Yes.

13142. And a member of the committee of mine owners of Scotland, a justice of the peace, and provost of the burgh of Renfrew?—Yes.

13143. Have you weighing machines placed at the pit bank in your collieries?—Yes.

13144. And are the coals all weighed?—Not all weighed.

13145. They may be weighed, I suppose?—They may be weighed.

13146. Have the workmen a check weighman?—Not at present; they have had a check weighman, but they never keep him any time.

13147. There is nothing to prevent their having a check weighman, is there?—Nothing to prevent them; I court it, and have again and again courted it from them, and told them that there is nothing to prevent it.

13148. You say that they have had one?—Yes.

13149. Did they remove him of their own free will?—Yes, they did.

13150. Was it in consequence of their finding his presence unnecessary?—Yes; they thought that they were rather worse off by the weighing than by the measure.

13151. But are we to understand that your wages are paid by weight or by measure?—They are paid by weight; that is, what we fix upon; but in order to save the pit head man the trouble of weighing every hutch that comes up, if he considers that a hutch is the weight, judging by his eye, we do not require him to weigh it. He may not weigh one in a day, and he may weigh 20, 30, 40, or 100, if he suspects that they are under weight; but whatever is sent up the collier gets it.

13152. Do I rightly infer from an answer which you have just given, that now that the weighing system is adopted the workmen still prefer the measuring system?—Yes, I would say that mine would prefer the measuring system.

13153. Will you tell us why?—Because if they send up 12 hutches in a day they may not all be the full weight, and they may gain perhaps by the measuring system five or six cwt. by the pit headman passing them over; but now we take very good care to bring them as near as we can.

13154. Then it is your opinion that the adoption of the weighing system has rather told against the workmen than otherwise?—For myself I would say so; I do not think that the great majority of the workmen desire it; and, for another thing, I am quite sure that the majority of the coal-masters are nothing against it. It gives the coal-masters a little more trouble, as the Committee can see, to weigh every hutch that comes up; but I believe that, to please the men, the masters are not against the system.

13155. It gives the coal-master a little more trouble; but, as I understand you, a little more coal also?—It would, I believe; it would give me more coal.

13156. And that is quite enough to reconcile you to the change?—Yes, but it is a great annoyance to have to weigh every hutch.

13157. *Chairman.*] Do I understand you rightly that, subject to the deduction of a little more trouble, the weighing would be advantageous to the masters?—Yes, I do think it would.

13158. And that the reason why some workmen prefer the measuring to the weighing is, that the measuring gives them a greater opportunity of taking advantage?—Yes.

13159. Therefore it would be the dishonest workman that would prefer the measuring to the weighing?—Yes.

13160. The honest workman, you think, who would wish to be paid for what he got fairly, would prefer the weighing?—Yes.

13161. And it would be to the advantage of the master, you say?—It would be to his advantage; the only disadvantage is the considerable trouble that is involved.

13162. I am requested to ask you whether you are aware that some of your men petitioned for the weighing?—But we do weigh now; that is the principle. There is a certain weight supposed to be in every hutch.

13163. How long is it since the weighing system has been adopted there?—I have been there for 25 years, and the payment during that time has been by the weight.

13164. Do you see any objection to having

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the weights inspected by the inspector of weights?—No objection. So far from that, I have wanted the inspector of weights for Dumbartonshire to come, in his usual rounds, to the place; and I had a letter in my possession, only lately, saying that he would, on coming round, visit the place, but that he had been at a place two miles off only three weeks before, and that he was not going to come up specially for me.

13165. Mr. *Liddell.*] How often do you settle with your workmen?—I settle with them once a fortnight, and pay them, every day, subsistence money, between 10 and 11 o'clock.

13166. What do you mean by subsistence money?—If a man has earned, yesterday, 4*s.* 6*d.*, he gets perhaps 4*s.* 3*d.*, or 4*s.* to-day.

13167. And that is what you call subsistence money, is it?—Yes.

13168. But that leaves a small balance to the man, at the end of the fortnight?—Yes; and you balance the account at the end of the fortnight; but, every morning, between 10 and 11, they get their money, if they wish.

13169. Yours then is a system of daily pay?—Yes, if the men wish it.

13170. Is that a common system in Scotland?—Yes; it is common to give subsistence money; but there are not many, I think, that carry it out as fully as I do.

13171. *Chairman.*] Are there any truck shops in your district?—I have none; but I understand that they have stores in some of the neighbouring works. I may say this, however, that I have been petitioned again and again by my men to start a store, because they considered it an inconvenience to be obliged to go for their goods perhaps a mile and a half or two miles, or to some of these neighbouring stores. I have been petitioned again and again to have such a thing, but I have set my face against it.

13172. Mr. *Foster.*] Is there no store or shop at your colliery?—One of the workmen started on his own account a store some years ago.

13173. With your permission?—With my permission.

13174. Mr. *Liddell.*] What is the nature of that store?—He purchases goods, and sells them.

13175. What sort of goods; is it a general store?—For all provisions.

13176. Does he sell any clothing?—I could not say.

13177. Any drapery?—No, I do not think so; I think only provisions.

13178. Does he sell drink?—No.

13179. Tea, coffee, and those things, I suppose?—Yes; I think so.

13180. Then, I understand you to say, that your workmen, in consequence of having now to go a mile and a half to purchase what they require, have often suggested to you to set up a store, but you have invariably refused?—Yes.

13181. May I ask your reason for refusing?—I thought that I had plenty to do without that, and I thought too, that it was no great inconvenience for them to go a mile and a half to the shops; and when I would not start a store, one of the workmen started a small place himself.

13182. Did you refuse to set up a store from a wish to avoid the odium that appears to attach to owners who keep shops?—Partly so; but also, because I did not see any great inconvenience in the men walking a mile and a half, and, therefore, I thought I would keep to my legitimate business of working the coal.

13183. Mr. *Foster.*] Would any workman in your employ be allowed to open a shop or store if he were so disposed?—They could all do it in their own houses; I would not prevent it. This man to whom I have referred, has just, in his own house, a small room, a kitchen, for selling small things and little conveniences.

13184. Mr. *Liddell.*] Are the cottages your cottages?—Yes.

13185. And you make no objection to the men having shops in them?—No.

13186. Would you make any objection to one of your workmen setting up an ale-house?—Yes.

13187. Or selling whisky?—Yes; I would not permit it on any account; he would not be one moment in my employ.

13188. *Chairman.*] Do your men work by contract at all?—Yes; according to the usual way in Scotland.

13189. Do the men take a contract and have workmen under them?—No; in driving a mine that is occasionally done, or in shanking a new pit it is occasionally done.

13190. If you worked by contract, you would not allow the contractors to open shops, I suppose?—I would not.

13191. You have reason to believe that the truck system does prevail at no great distance from you; within a mile and a-half, I think you say?—Yes.

13192. Do not you think that if the truck system were effectually put down, there would be a greater amount of open shops; do not you think, in fact, that what prevents open shops being kept within a convenient distance of your colliery is, that the custom of such shops is restricted by the prevalence of the truck system in other places near them?—I do not; I think the system is a great convenience to the men. I am referring now to my neighbours, and I say that it is a convenience to my neighbours' working men. Messrs. Merry and Cunningham (they are my next neighbours) erected a store at their works, and had they not done so, I do not see that any other party would have done it, because they are in an outward place, far from a town, and no other person would come there and build a house for the purpose of opening a store for a work which may not last above 10 or 15 years. The mineral is always going down, and there are no men of capital going to come there, and build a house for the purpose of a store, with the chance of the work coming to an end altogether in 10 years.

13193. Do not you think that if an open dealer could have both the custom of Mr. Merry's men, and that of your men, he would be induced to open a store?—No; I say that no man of capital would come and build; it must be a collier or an iron proprietor who would build the house, because our minerals are going down, and they may not last 15 or 20 years, and therefore no other man with capital would build a house and open a store.

13194. Then you think that about a mile and a half from you the truck system is necessary or useful?—I have said that I did not think it a great inconvenience, although the men considered it to be so themselves, for my own men to go so far to shops, but my neighbours are perhaps two or three miles off, and it would be a great inconvenience to them.

13195. You mean that they are further off than you from any town or shop?—Yes.

13196. Mr.

13196. Mr. *Liddell.*] How far are Hardgate and Duntocker from Mr. Merry's works?—Hardgate is a small place (a clachan we call it), of two or three houses, and it may be from some of Mr. Merry's pits, a mile. Duntocker is a village, with a good many inhabitants, and may be from Messrs. Merry's works about a mile and a quarter or a mile and a half; but Duntocker, since Messrs. Merry went there, has been almost a deserted town. It altogether depended upon the cotton trade, and at the time of the great depression of the cotton trade and the death of the proprietor of the large works there, Mr. Dunn, the places were all stopped, and it has been a deserted village since then, and I think Messrs. Merry found it a great convenience to erect a store of their own.

13197. You said, I think, that Hardgate was a clachan?—Yes, what you call a hamlet in England.

13198. *Chairman.*] Perhaps you are aware that in England (and I dare say it is so in Scotland), grocers in the country are in the habit of sending carts round to their village customers?—That is not the custom in Scotland; fleshers do that, and bakers, but not grocers.

13199. Do not you think that if a shopkeeper at this clachan had the benefit of your custom as well as of Mr. Merry's, he would be willing to send a donkey-cart round at a certain time to the men's houses?—Yes, but I do not think that the men would be satisfied with that; they like to see the goods in the shops, and their wives like to go out shopping: it is their occupation.

13200. The women do not work on the pit-bank, do they, at your works?—No.

13201. Would there be any great difficulty in the women going to such a shop, once a week, a distance of a mile and a half, and what they ordered coming round the next day in the donkey-cart?—I do not think there would, and that is the reason why I have not started a store; but still I say that the workers do not like it; they like the place at their very doors, so that they can just go out of their houses and get a pennyworth whenever they like.

13202. They have never had the opportunity of trying the other system, have they?—They have, for 10 years, with me.

13203. But not at Mr. Merry's works?—No, because I believe that he considered it a part of his good management to provide for his workers; that is to say, to provide not only houses but shops for them.

13204. Mr. *Liddell.*] Will you describe to the Committee what means you provide for the education of the children of your works?—There is a school and a schoolmaster provided, and we take 2 *d.* a week off each man for the schoolmaster.

13205. Twopence a week per child, you mean, I presume?—No, not per child, but 2 *d.* from each man, and by working in the pit. If a man has half a dozen children in the school, they get it all for 2 *d.* a week, and the whole goes to the teacher.

13206. That deduction of 2 *d.* a week for schooling commences at the earliest age of boys, as I understand you?—Yes, at the earliest age, and they can send them as soon as they like, at three or four years of age, if they liked.

13207. Do the children attend school largely?—Yes, they attend very well.

13208. I have not yet asked you the number of workmen you employ?—About 150.

13209. Did you build the school?—Yes, it was built for the colliery.

13210. And you subscribe something to its support, do you not?—Yes; the money from the workmen nearly supports it; the proprietor, Mr. J. C. Colquhoun, gives a little in addition, and I think one or two of the farmers also.

13211. Then it is not strictly a colliery school, is it?—Yes, it is strictly a colliery school; but there being no other school in the district, the farmers have the liberty of sending their children to it, and of course they pay the regular fees that they would pay in Renfrew or any other place.

13212. Is it inspected under the Committee of Council for Education?—No.

13213. And it receives no Government grant therefore?—It receives no Government grant. Of course it is inspected by the Presbyterian minister of the district, but there is no Government grant; it never was applied for.

13214. Will you give us some information about the boys you employ; have you any boys under the age of 12?—No.

13215. *Chairman.*] You do not publish any accounts of the school money, do you?—No; there is no account published, because the teacher just comes up every fortnight, and receives from the clerk what has been drawn that fortnight from the men.

13216. Do you see any objection to publishing yearly a statement of what you have received towards the school, and the way in which you have spent it?—I see no objection to it.

13217. But that has not been done?—It has not been done, but there is no objection to it on my part. I believe, however, that the men are perfectly content on that point, and are satisfied that every farthing goes to the teacher; indeed, the teacher looks to that himself.

13218. Mr. *Liddell.*] Do not the boys make any complaint of having the twopence a week deducted from their wages for school purposes?—No, they do not; because they go to the night school, and so receive benefit for that twopence.

13219. Then the boys have the privilege of attending the night schools?—Yes, they have that privilege.

13220. Have you had any representations on the part of Roman Catholic parents, complaining of hardship in having to pay towards the support of Protestant schools?—Never; and I may state, that I have a great many Roman Catholics. The great majority of them are Roman Catholics, and not one of them objects to send the children to the school. I may mention that we had an examination only the other day, and I was very pleased to see so many Roman Catholics, and to find them able so nicely to read our Bible, no objection being made to that.

13221. Are we to understand that the majority of the children are of the Roman Catholic religion?—Yes, I may say that the majority are.

13222. Is not that rather a peculiar circumstance in Scotland?—No, not for those who are situated as I am; there are a great many Roman Catholics in my neighbourhood; and a great many of the colliers about Glasgow, I think are Roman Catholics.

13223. Mr. *Foster.*] Are the parents Irish?—Some of them. Of course the children I refer to, are descended from Roman Catholic parents.

13224. Mr. *Liddell.*] But is there a large resident Roman Catholic population?—Yes, and

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in the neighbourhood, namely, at Duntocker, three miles off, there is a Roman Catholic chapel.

13225. Has the priest access to the school?—The priest has access to the school if he likes; only lately there was a *soiree*, that the men got up, in connection with the school, and I suggested that the priest should be invited down, but he did not come; I do not know that he really was invited; I merely suggested it to the men, and said, that I would have no objection myself to his being invited.

13226. Does instruction in the Holy Scriptures form part of the school teaching?—Yes.

13227. Every day?—Yes, I believe they read the Bible every day.

13228. And is no objection made by the priest to that?—No objection was ever made to me.

13229. Has the priest the privilege of entering the school at any stated hours, or at any hour he pleases, to give religious instruction to the children?—I do not think it has gone that length, and I hardly think that we would allow our Presbyterian minister to do it; he would be taking the place of the teacher then, and that would not be prudent. There never has been an application made to me by either one or the other.

13230. Is the teacher a member of the Church of Scotland?—He is a member of the Church of Scotland.

13231. These children, I presume, attend their respective Sunday schools; that is to say, Roman Catholic children will attend their own Sunday school on the Sunday?—Yes. There is a Sunday school kept in the school-room, and there is another house where the Catholics assemble and have a Sabbath school for themselves distinct.

13232. The Sunday school which is kept in the school-room, being in connection with the Church of Scotland?—In connection with the Church of Scotland.

13233. Have you any females employed at your works?—No females.

13234. There has been a great deal of evidence given before this Committee as to the advantages of sub-inspectors, will you give your opinion upon that point?—I do not see any necessity for it, not the least; I think that it would lead to the greatest confusion, and I can see no use in it; indeed I think harm would result.

13235. Have you heard the evidence, or have you been made acquainted with the nature of the evidence given here yesterday by Mr. Woodhouse, as to having a body of assistant inspectors in the nature of pupils, under the present inspectors, with the right of access to the different collieries?—Yes.

13236. Do you approve of that suggestion?—I do not, and I say that no practical man, no coalowner would advance any such theory as was advanced yesterday.

13237. Knowing the feelings as you do of the coalowners in your district, you are prepared to say that they would not sanction such a proposal?—They would not sanction such a proposal, and there is no use in it, because these pupils that Mr. Woodhouse talks about are not practical, and would be of no use at all. Every working collier can do all that Mr. Woodhouse depicted yesterday, and far better, ten times better than any young man could do it, who has been perhaps once or twice, or a dozen times down a pit. Any working man can convey information to the master if he sees anything wrong; or if the master does not redress it at once when he complains he can convey information to the inspector of mines, who will look to the matter immediately.

13238. And you think that any suggestion of that kind made by a thoroughly practical man would receive more weight from the master certainly, and from the inspector probably, than any suggestion which might be made by one of these pupils?—No doubt, because we know very well that all these young men are inflated with great ideas of their own importance. Having been once or twice down a pit, they think they know everything, and you are tormented with their suggestions, whereas the working collier has the whole power that Mr. Woodhouse depicted yesterday, and can do the thing far better than these young men.

13239. Practically is it within your knowledge that these representations are made to the inspectors by the working colliers?—Yes; if the evils are not redressed at once by the master, the working colliers complain to the inspector, or they complain to their worthy secretary, Mr. McDonald, and he makes a molehill into a mountain at once, with regard to the colliers.

13240. Mr. *Woods.*] You think he represents them very well?—I think he does very well.

13241. Mr. *Liddell.*] You think that as long as Mr. McDonald's life is spared (and we hope it will be very long), he supplies adequately the place of any number of pupils of the sort described by Mr. Woodhouse?—There is no doubt of it.

13242. There was a good deal said yesterday as to the consequences which would result from placing a large amount of information in the hands of these pupils, what is your opinion upon that point; do you think that a coalowner would like this information to be possessed by a body of unauthorised persons, who might make use of that information in after life to his prejudice?—I think that the coalowners would decidedly object to such information being possessed by them; but of this I am sure that the coalowners in general, if they saw any good from it, would sacrifice that little knowledge if there was a single life to be saved, but these assistants would be of no benefit.

13243. Complaints have been made, and possibly with some foundation, that the inspection is inadequate; is there anything, as far you understand it, in the present Act of Parliament to prevent the Home Office from increasing now to an unlimited extent the staff of inspectors?—Nothing; they can increase to an unlimited extent now the staff of inspectors.

13244. And you, speaking as a coalowner, and on behalf of other coalowners, have no objection whatever to inspection properly carried on under the superintendence of the Home Office, and upon the responsibility of the Secretary of State?—None at all; I am quite sure that every coalowner I know is always glad to see the inspector.

13245. Do you ask the inspector, if he presents himself unawares, what reason he has for coming?—No, I never put such a question to him.

10246. And practically does he so present himself occasionally, without giving you any notice?—He does.

13247. So that there is nothing in the present system which prevents any amount of inspection being carried on, and that inspection receives no let

let or hindrance on the part of the coalowners?—Just so.

13248. Mr. *Kinnaird.*] I think you have stated that there is not the slightest necessity for any sub-inspectors: how many coal pits are there in Scotland should you think?—I am not sure of the number.

13249. Perhaps if I say 1,150 you would not be disposed to quarrel with that number, which I think we have already got in print?—Perhaps that is correct.

13250. I think you have at present two inspectors?—We have two inspectors.

13251. One thousand one hundred and fifty seems to me to be a great number of pits for two inspectors to inspect?—Yes.

13252. One inspector would have, we may say, 550 pits to look after?—Yes.

13253. Could he possibly, as a physical question, properly inspect those pits in less than two years; that is to say, could he more than once in two years go down each of the pits?—It is not required that he should.

13254. I only asked whether he could physically do it?—I do not think he could.

13255. What is the object of appointing inspectors; is it not to correct any abuses that may exist in the pits?—Yes.

13256. Parliament has thought it proper that pits should be inspected?—Yes.

13257. And yet it is physically impossible that this one inspector could visit 550 pits, or certainly he would take two years to go down them all?—Yes; but there may be pits among these 500 or 600 pits that he may not need to inspect once in five years; it is only when anything is wrong that he requires to go down.

13258. I did not ask your opinion about it; but the fact is that Parliament thinks it necessary that all these pits should be inspected, does it not?—No; Parliament does not think any such thing, in my view.

13259. Mr. *Woods.*] I believe that it is the good management of the daily details of a colliery by which efficient ventilation is secured, and, therefore, the person probably who has charge of the daily details must be resident on the colliery?—Yes, he must be.

13260. If, therefore, any person under the title of an inspector is to be responsible for the management of the daily details, he will have to reside on the colliery?—Yes.

13261. And, therefore, it becomes a question of how much inspection is to be entered into by the Government inspector?—Yes.

13262. As to the assistant inspectors who were suggested by Mr. Woodhouse, with regard to which question you have been examined, I understand you to say that the owners of mines would have a great objection to that system; I suppose that being an owner of a mine yourself, you agree with me that the knowledge of many of the detailed circumstances of a mine is in itself a property?—Decidedly.

13263. And you do not wish, therefore, to increase the number of persons who visit your mine, nor do you wish to decrease the responsibility of their appointment; do you assent to both those propositions?—Yes, I do.

13264. And, particularly, you would object to being compelled to receive a number of visitors in your mine, who were appointed by what was or might be a less competent authority than the Secretary of State?—Yes.

13265. And you vouch of your own knowledge for your opinion being entertained generally by the other owners of mines?—Yes, I do. *J. Robertson, Esq.*

13266. *Chairman.*] Your idea of the duty of an inspector is, that he should not visit a mine till he had some complaint about the mine or some accident, I apprehend?—No, that is not the way in which the inspectors act in Scotland. They come round occasionally and inspect the mines, but if anything is wrong they come at once. If they are informed by any of the men of anything being wrong, or even if the master wishes their advice upon any particular point. they would come round at once. 6 July 1866.

13267. But you think, as I understood you, that independently of that they ought to go down occasionally without any special cause, and without any notice of their coming?—Yes.

13268. Mr. *Liddell.*] Speaking as a magistrate of long standing, and as a coalowner, can you say that the verdicts give general satisfaction?—I can.

13269. You have heard no complaints on the part of the workmen upon that subject?—No complaint as long as I have been a magistrate.

13270. To what do you attribute, for the most part, the accidents that happen in collieries; is it to carelessness or is it to a want of skill in the agents, overmen, and others?—Most decidedly to the carelessness and the recklessness of the men themselves; there is no doubt at all in my mind with regard to that. We are always cautioning our underviewers to aid the men as much as they can in preventing these things.

13271. What is your opinion upon the subject of requiring agents and chief managers of mines to hold certificates of competency, and to be subjected to a scientific examination?—I do not see the use of it, and I do not see that it would work well at all. Some of our best managers can neither read nor write; it is a practical knowledge that is required, and sometimes this scientific or theoretical knowledge is not worth anything.

13272. Perhaps you can state to the Committee the mode in which you engage the services of your agents, overmen, and chief managers; is it from your own knowledge of their fitness that you select them?—Distinctly, from our own knowledge of their fitness to undertake the duty; I am speaking now of the underground viewers.

13273. The responsibility resting with you, and the whole safety of the pit depending upon their care and precaution?—Yes.

13274. And, consequently, it is the interest as much as it is the duty of the owner of a mine to make the selection with the greatest possible care himself?—No doubt of it.

13275. *Chairman.*] I understood you to say that some of your best viewers could not read or write?—Some of our best viewers, that is to say underground viewers (I do not know at this moment a case), perhaps may not be able to read and write.

13276. I thought you said that as a fact some of them did not know how to read and write?—I did not say so as a fact; I meant that it may be so. I would say that I speak of underground overmen, or underground viewers.

13277. Mr. *Liddell.*] When you made use of the word "managers" just now in reference to qualifications, did you mean by "managers" underground viewers?—I meant underground viewers. A practical underground viewer may be

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be as good a viewer or overman as we can get, although he can neither read nor write, and we had that illustrated yesterday by Mr. Woodhouse himself, who referred to the case of George Stephenson.

13278. But this is not the class of persons in whom the management of the pit is practically vested?—No, it is not.

13279. *Chairman.*] You have said that there are some of these underground viewers that cannot read, but you did not mean to say that from your own knowledge, as I now gather?—No.

13280. Do you think that the education of those who work on the mines in Scotland is on a par with those who work in the same condition of life in other occupations in Scotland?—I do.

13281. Are there many men in Scotland corresponding in position with the underground overman, in regard to the wages which they receive, who can neither read nor write?—No, I do not think it.

13282. Then, if that is so, the average education of the colliers is below the average education of the country, is it not?—No, I do not think it.

13283. But you say that you do not think that there are many men out of collieries who, as to wages and as to social standing, are on a par with the underground viewers who cannot read and write?—No, there are not many such. I think that in Scotland we are considerably advanced in education with all classes.

13284. But you think that there may be many that cannot read or write in the same position in the collieries?—There may, although I do not know, to my knowledge, such a case in the country. What I wished to bear out was, that a man though he could neither read nor write could be a first rate underground overman.

13285. Mr. *Liddell.*] These underground overmen are selected, in many instances, from workmen themselves, are they not?—Yes, they are.

13286. And they probably have arrived at least at middle life?—Yes, almost all at middle life.

13287. And they were consequently brought up 20 or 30 years ago?—Yes.

13288. Was the state of education among the particular class from which they are drawn the same 20 or 30 years ago as it is now?—It was not.

13289. Will not that account in a great degree for the absence in their case of that elementary knowledge which is now common among all classes?—Yes, it will; and that is the reason why I say that some of our old men, who are still kept on as viewers, perhaps can neither read nor write.

13290. They probably cannot, you mean?—They probably cannot.

13291. But that does not detract from their practical merits, which entirely fit them for the performance of their duties?—It does not.

13292. And it does not lessen the confidence that their fellow workmen have in their capabilities?—It does not.

13293. Mr. *Woods.*] As a magistrate, have you ever had any complaints made before you in reference to truck?—Not any.

13294. Mr. *Powell.*] Laying aside comparisons between those employed in one class of labour and those employed in another, will you favour the Committee with actual information of a positive and affirmative character; what should you say was the average attainment of a decent respectable collier, as regards education, taking an average steady man, not a genius, and not a stupid man, but a sample of the class?—I would say that perhaps the one-half of them can read and write; but I think you may take it that the remainder really cannot read and write; and Roman Catholics, I believe, are rather behind in education. That applies to those who are advanced in life. But if you take the younger portion, brought up in recent days, they are all able to read and write, and you will see them all using newspapers, and especially the favourite paper there, which has been established for the colliers, the "Sentinel;" they are all purchasing that paper once a week.

13295. You find that they all actually and practically read?—Yes.

13296. It is not a mere flourish; but they can read so as to enjoy a newspaper?—Yes.

13297. And do you find that they write with such facilities as to correspond with their friends with ease?—Yes, the younger portion.

13298. As regards that most important element of education in household management, arithmetic, do you suppose that they know enough of that to check their household expenses?—Yes, and they can check their own pays very well.

13299. Mr. *Woods*] If complaints as to truck were made in your neighbourhood, would they go before you as a magistrate or before the sheriff?—They would go before the sheriff.

13300. You have no jurisdiction over truck?—I have no jurisdiction over truck.

Mr. Archibald Hood was called in; and Examined.

Mr. *A. Hood.*

13301. Mr. *Liddell.*] You are a Coal-master at Lasswade, near Edinburgh, are you not?—Yes, I reside there.

13302. Also at Bankhead, near Glasgow?—Yes.

13303. And you are also engaged in working coal at Cardiff, I believe?—I am managing partner of collieries near Cardiff.

13304. You reside near Edinburgh, you say?—I reside near Edinburgh.

13305. And you manage the collieries in South Wales as well as collieries near Edinburgh?—Yes; I take the general direction of them.

13306. What number of men do you employ?—I should say near a thousand men.

13307. You are now going to speak for Scotland, I believe?—Yes.

13308. Understanding that you are now going to speak for Scotland only, will you state how you pay your men?—We pay them fortnightly.

13309. Do you pay your men by measure or by weight?—Generally by weight, but in one special instance we pay by measure.

13310. Do you give any preference to one system over the other?—At Whitehill Colliery we pay the large coal by weight, and give the collier every thing that the tub contains, with the exception of fractions within half a cwt.; half a cwt. or any fraction is not paid, and it is an understood thing that it is not.

13311. What

13311. What is the weight of the tubs?—They run about 6 cwt. to 8 cwt., 9 cwt. some of them. The small coal there is put out separately, and I think that, in that case it is a fairer test of the men's work to measure it, because if you were to take it by weight careless men would have great facilities for putting out fire-clay along with it, and it would be very difficult to test it. I think that the small coal is sufficiently tested by being measured.

13312. Have the men ever made any representations to you in favour of adopting the weighing system for all sorts of coal?—I believe they have, but I do not think that they have been very zealous on that point. From talking over the matter with them I think the more intelligent of them are quite reconciled to the measurement, in that case.

13313. They admit the validity of your reasoning?—Yes.

13314. How long have you introduced the weighing system?—It has been in force a long while; I think ever since I had anything to do with the management, that is to say 20 years ago.

13315. Am I to suppose that the usual mode in your district is to weigh, and that the exceptional mode is to measure?—Yes.

13316. Have you any yardage system?—Certainly.

13317. Have you any stores?—None.

13318. Have you plenty of schools?—Plenty. We have two schools at Whitehill Colliery, one for boys and another for girls.

13319. Are they well attended?—They are very well attended.

13320. As to your Bankhead Colliery, near Glasgow, have you a school there?—It is very near a large village, where there are a great number of schools, and we did not require to provide schools especially there.

13321. At Whitehill, I believe the expenses of the school are pretty evenly divided between lessor and lessee?—The lessor and lessee jointly subsidize the school, and in that way we obtain a Government grant as well; it is under Government inspection.

13322. Is there any deduction from the wages for the schooling?—Each of the children pays from 1 *d.* to 3 *d.* per week for its education. There is no deduction made per man, but per child who attends the school.

13323. There is a large margin between a 1 *d.* and 3 *d.*; will you explain that?—When a young child goes (at five years old perhaps) it pays 1 *d.*, and the payment rises gradually.

13324. According to the age and the character of the instruction?—Yes.

13325. Do you employ boys under 12 years of age?—I have not one in my employment.

13326. Do you wish to see any further legal restrictions placed upon the employment of boys?—No.

13327. You think that legislation has gone far enough in that respect?—I think it has gone quite far enough, and it has so far served its end as to practically exclude children under 12 years of age.

13328. In the event of further legislation being thought necessary, and in the event of the hours of labour being shortened, could you obtain a sufficient supply of boys to make it up?—No, we could not.

13329. Could you conveniently manage a system of reliefs?—No, that would be quite impracticable, I think.

13330. Do you find that the employment of boys in collieries affects their health or physical condition in any way?—Not in well ventilated mines; I think it is a very healthful exercise in well ventilated mines.

13331. But you draw a marked distinction between their employment in well ventilated mines, and in ill ventilated mines?—Most distinctly.

13332. And you think that unless very great care is given to the ventilation the health of children may be seriously affected?—It may; but generally speaking they breathe a better atmosphere than the men, because they are employed upon the roads, which ought to be to a certain extent air courses.

13333. Does your experience lead you to think that a deleterious atmosphere tells more upon the youthful constitution than it does upon the adult constitution?—No doubt, but it tells very badly upon either.

13334. I should like to have your opinion upon a new plan that has been proposed to us of pupil assistants to the present inspectors?—I think that it would give rise to a very great deal of unpleasantness between the inspectors and coalowners, and that it would thereby impair to a very great extent their efficiency. Besides that, I do not think it is the best means of educating youths to be either inspectors or colliery viewers, to put them into a condition of *espionage*. I think a young man can learn the profession of a mining engineer, to fit him for being either an inspector or a viewer by being placed under a colliery owner; he has much greater facilities, I think, in that way for learning his profession, than in the service of an inspector.

13335. Practically, are a considerable number of young men so trained?—Constantly; I have some under training myself.

13336. Then, in fact, there is a constant system of practical training going on in all the colliery districts of the country?—Constantly.

13337. From that source the supply of managers and viewers is derived?—That is so; we have constantly to train both our overmen and managers.

13338. And when the idea is started that the education of that class that I have spoken of, managers and viewers, is neglected, a great deal of misapprehension exists upon that point?—No doubt.

13339. In fact, the qualifications requisite to enable men to fill those important offices, can only be obtained by the practical education which they in fact do obtain in the way that you mention?—Only in that way.

13340. Are you in favour of that class of persons holding certificates of competency obtained from some independent board of examiners, and conducted under a Government authority?—I have paid a great deal of attention to that subject, and I confess that I thought more of it at one time than I do now; no doubt a man is the better for education; but we tried in Glasgow to establish something of the kind by having a mining school in operation, and I am sorry to say that it only received support for about three years, and then it went down. A considerable number of the chief coalowners and iron-masters in Scotland supported it, but we were not able to keep it going.

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13341. Can you give the Committee any reasons for its decay or failure?—I do not know any reason, unless it were just this, that the most of us (I may state that I was a member of the committee) were more inclined to have men of our own training than any sort of extraneous aid that we could get in that way. With the common education that they could get at any school, and with their practice in the mine, the men of our own training were better able to conduct the operations of the mine than any that we could get anywhere else.

13342. Will you explain to the Committee a little more about this school; were there lectures and classes in connection with it?—There were constant lectures, in fact, daily, and the pupils sat in the school for several hours a day; perhaps it was kept open five or six hours a day, and they were taught drawing, surveying, and other branches of educating bearing upon mining operations.

13343. Then the pupils were not housed upon the spot?—No.

13344. They attended particular classes, upon the payment of certain fees, I suppose?—Yes; the fees were very small; 6 *d.* a week, or something like that.

13345. Was it the inadequacy of the fees to keep up a proper staff that led to the failure?—No, we did not expect much from fees; the thing was kept up by the coalowners and ironmasters.

13346. Were there any lecturers connected with the school?—There was one lecturer only connected with the school; he had had some experience in South Wales, and had served his time in the North.

13347. Was he up to his work?—He seemed to know it very well.

13348, Were there diplomas given, or anything in the shape of certificates?—There were certificates of merit, and prizes given yearly.

13349. And did you find that the holders of those certificates of merit obtained employment more readily than those who did not hold them?—Yes, I think they did.

13350. Then they were of advantage in launching young men into life?—They were; there is no doubt of it.

13351. Then why did so valuable an institution as this appears to have been, fall to the ground?—It fell to the ground for want of attendance.

13352. Mr. *Foster.*] Not for want of funds?—No, not for want of funds. We were quite willing to subscribe to it to keep it going.

13353. Mr. *Liddell.*] Then the advantage which these certificate holders appear to have obtained was not such as to keep the school going?—No.

13354. *Chairman.*] What was the average distance that the pupils would have to go?—They had considerable facilities in that respect, because those who resided at a very great distance came to the neighbourhood of Glasgow; those who could afford to live without work lived in Glasgow, and those who could not were always provided with employment at collieries quite near Glasgow.

13355. How near are there any collieries to Glasgow?—There are collieries almost within the precincts of Glasgow.

13356. Mr. *Powell.*] Is there ironstone in the same collieries?—There are ironstone pits close by Glasgow, almost within the city.

13357. Mr. *Liddell.*] Were the collieries about two miles from the school?—There were collieries two miles off, but some of the collieries were hardly two miles from the school.

13358. Had the pupils attending the classes in this school free access to the collieries in the neighbourhood?—Yes, free access to all the collieries.

13359. So that there was a combined scientific and practical education going on at the same time?—Yes.

13360. How were your special rules framed?—They were framed by a committee of colliery owners in 1855, of which I was one.

13361. Had the inspectors anything to do with it?—We took the inspector of the district along with us, and they were framed quite according to his satisfaction.

13362. Were they satisfactory to the men?—I never heard any complaint about them, except as to one or two. I think there was a reference on that point; it was referred to Mr, Landale of Edinburgh.

13363. Do you mean by a "reference," an arbitration?—Yes, under the Act.

13364. The reference to arbitration was in consequence of some representation on the part of the men, I suppose?—Yes.

13365. Will you explain the circumstances?—The men objected I think to rule No. 3. I really forget what the difference was, but I have no doubt that some of the witnesses who will follow me can explain that.

13366. Will you read the rule?—"Besides the intimation of apparent safety given by the fireman, colliers must satisfy themselves of the safety of their working places before commencing to work, either at the beginning of a shift, or after any interruption of work during a shift; and shall obey the orders of the underground manager, or overman placed over them, in all matters relating to their work, and the ventilation and safety of the pit."

13367. In the event of the men objecting to any special rule, they have the power I believe under the act of enforcing the amendment of such rule?—Yes they have.

13368. And this case is an illustration of the exercise of the power which they have under the act?—Certainly.

13369. There are certain restrictions in some of the coal districts in Scotland, upon the get, are there not?—Yes.

13370. Will you explain what they are?—The men generally combine to restrict the darg or get, to a certain amount.

13371. What is the object of restricting the get; is it to keep the price up?—I think it is to keep up the wages.

13372. Do any of the men complain of that restriction?—Yes; when I have spoken to good strong men who had large families to support, I have sometimes asked them to put out more, but they generally evade the question if they can, and if they are put to it, they say that they dare not.

13373. It is a species of protection, in fact, to the indifferent workmen rather at the expense of the good workmen?—No doubt.

13374. Do the masters like it?—No, I should think not; the masters like to give every encouragement to industrious men to put out all they can.

13375. And to get the greatest quantity of coal brought to bank?—Certainly.

13376. Mr. *Foster.*] Have you a co-operative store among your workmen?—We have.

13377. And you encourage such action on the part of the men?—Yes.

13378. Would the existence of a master's store attached to a work, stand in the way of the establishment of a co-operative store by the workmen themselves?—Yes; it would.

13379. Mr. *Powell.*] With reference to this mining institution which seems to have been so valuable, and which yet failed, under whose management was it?—It was under the management of a committee of the coal and iron masters of Scotland.

13380. Do you think that the fact of the management being confined to the masters rendered the institution less popular amongst the men?—I do not think it did.

13381. Can you assign any cause for the disappointment that arose in reference to that institution?—I have some difficulty in assigning a cause; I supported it in every way in my power.

13382. Knowing, as you do, the habits, temper, and disposition of the men, are you able to say that the failure was not caused by a feeling on their part that it was too much in the hands of the masters?—The failure was entirely on the part of the men.

13383. Were the classes in this school above them; was the teaching such that they could not reach it?—No; the teaching was brought precisely to their level.

13384. And there was a disposition to adjust the teaching to what might prove their level?—Certainly.

13385. Were there charges for that instruction?—Trifling. I think it was either 3*d.* or 6*d.* a week; I forget which.

13386. Were the rooms airy and cheerful?—Yes; very nice rooms.

13387. And within reasonable distance of their homes?—Yes, those who could afford it ceased work altogether, and lived in the town; others, who could not afford to do without their labour, worked in adjoining collieries for part of the day.

13388. Do you mean, when you speak of some of them ceasing work, that they ceased work altogether?—For months together.

13389. Then the institution was so situated as not to be within reach of a collier doing his work in the ordinary manner, I suppose?—A number of them did their daily work at the same time.

13390. I am referring to a collier who performed his ordinary duties in the ordinary manner, without disturbance of the hours of work; could he easily attend the institution?—They may have worked a little less.

13391. There must have been some disturbance of the usual hours of labour, in order for them to attend it?—You could not call it "disturbance," because a collier can go down at four or five in the morning, and come up at 12 o'clock in the day, if he chooses.

13392. But that is not the usual practice, is it?—No; it is not the usual practice.

13393. Then in order to attend this institution, a collier must have done something which would be regarded as rather unusual?—Yes, when he did that.

13394. Do you think that that would account for the failure of the institution?—No, I cannot account for it in any other way than I have already done.

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13395. Do you think that if the men had had the will, they would have found the way?—Yes.

13396. Mr. *Foster.*] Do you think that the fact of its being necessary for men to forego the earnings that they would be obtaining at work during the time that they would be in pupilage at such an institution, might be a reason why the number of pupils would fall off?—I think that if they had been very anxious (as anxious as I was when I was a young man) to obtain education, they might easily have attended their work in the forenoon, and the school in the afternoon.

13397. But could they have attended work in the forenoon and followed a course of study at this college at the same time?—There was some little difficulty in doing that; perhaps it required a little extra exertion.

13398. Might not that possibly account for the falling off in the numbers of the attendants?—It might; and no doubt a number who were inclined to follow the occupation of overman or manager, discovered that they could obtain their education far better in some large iron work or colliery.

13399. And be earning their wages at the same time?—Yes.

13400. And is not that the way in which the great majority of the underground overmen have been educated?—No doubt; that is the way in which I was educated myself.

13401. Do not you think, that however desirable scientific education may be, the facilities for getting that practical education, combined with the earning of wages at the same time, may prevent the success of such institutions?—I have no doubt that was a reason.

13402. *Chairman.*] Should not you yourself have preferred as viewer or manager a man who had been partly educated in a school like this, and who had partly gained his knowledge by practical working?—I believe he would be all the better for having had education in such a school.

13403. I presume you thought it was likely to be of some advantage to the formation of good viewers and managers, and that was your inducement in establishing the school?—No doubt.

13404. As a fact, as I understand you, the owners of collieries did not show any great preference in their selection of viewers for those who had been educated in this school?—It was not in existence so long as properly to test it.

13405. I know you have given great attention to all these questions with a very fair and friendly spirit, and therefore I should like to ask you whether, assuming that there is some sort of work that is better paid by measuring, and some sort of work that is better paid by the weighing system, you see any great inconvenience in having a general law, that the works should always be paid by weight, except in cases where payment by measure had been allowed upon special grounds with the assent of the inspector?—I think it would be an unnecessary restriction upon the trade; I do not know that any good could result from that.

13406. You think it is better to let master and man together find out which suits them both best, weighing or measuring?—I think it is.

13407. You prefer weighing, do you not?—I do prefer weighing generally.

13408. As being fairer to both parties?—In

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some cases the measuring is quite fair; I have given an illustration of that.

13409. I believe your colliery is very well ventilated?—It is not for me to speak upon that.

13410. Assuming that it is, is it in consequence of any application of new methods of ventilation?—No.

13411. You do not conceive that you have made any discovery in ventilation?—No.

13412. Only that you have used the usual method with greater efficacy and liberality than others?—Yes; possibly that is so.

13413. In fact, ventilation is a question of money, is it not?—No doubt.

13414. Do you use exclusively furnace, or do you use mechanical ventilation?—I use exclusively the furnace.

13415. Have you tried the other?—I have not, but I am very much in favour of the other in some cases.

13416. Mr. *Woods.*] In reference to yardage, you have stated that both systems are in use at your collieries, both yardage and weighing; can you give approximately the proportion between the amount of wages paid by way of weight, and the amount paid by way of yardage?—They are mostly paid by weight in Scotland.

13417. But approximately could you state the proportion?—No, I could not.

13418. In reference to ventilation, is it by daily and hourly attention to the working details of a colliery that successful ventilation is secured?—Certainly.

13419. And when you were asked if it was a question of money, it is quite possible, I suppose, that money might be spent without there being a good ventilation as the result?—Yes.

13420. Mr. *Liddell.*] Are there any truck shops in the district round Lasswade?—That is to say, stores in connection with collieries; no, there are none.

13421. *Chairman.*] There are none in the county, are there?—No, I should think not.

13422. Are there co-operative stores of workmen like yours in connection with other collieries?—Not in Mid Lothian.

13423. But in other collieries in Scotland?—I believe there are.

13424. Mr. *Liddell.*] Are not your collieries at a very great distance from any town?—Our White Hill Colliery is at a considerable distance from a town; three and four miles from towns.

13425. It is further removed from a town than almost any other colliery that you know of?—I believe it is.

13426. *Chairman.*] Is it a deep colliery?—No, it is not a deep colliery.

13427. How deep is it?—About 50 or 60 fathoms deep; quite shallow.

13428. Mr. *Liddell.*] And the workmen do not experience any inconvenience or complain of any inconvenience, do they, from having to go that distance to market?—They do not go that distance; at least, it is only a minority that go that distance to market; the majority deal at the co-operative store.

WILLIAM BURNS, Esq., called in; and Examined.

W. Burns, Esq.

13429. Mr. *Liddell.*] YOU are a solicitor at Glasgow, are you not?—I am.

13430. And Secretary to the Mine-owners' Association of Scotland?—Yes.

13431. And member of the executive committee of the Mining Association of Great Britain?—As representing the Scottish section, I am a member of the executive committee.

13432. I must refer you to Mr. M'Donald's evidence, Question 6979, in answer to which, as I understand, it is stated that the Mines Inspection Act is comparatively inoperative in Scotland, or some words to that effect?—In answer to Question 6979, and in subsequent answers, it is set forth by Mr. M'Donald that the Mines Inspection Act, as regards the enforcement of the rules applicable to the masters, is practically inoperative, for reasons which he gives. I wish to make a statement upon that point. The Honourable Members of this Committee, I dare say, are aware that we have in Scotland a system of public prosecution, consisting of the Lord Advocate at the head of it, his deputes below him, and procurators fiscal in the various counties, and districts of counties, to the sheriff courts. Further, it is an established doctrine, in our law, at least, that with reference to the recovery of penalties in statutes, a common informer cannot prosecute unless the statute itself permits him to do so, or unless he has an interest in the penalty to be recovered; so that on the one side we have this system of public prosecution, and on the other we have the exclusion of private prosecutions, unless in the two cases which I have explained.

13433. Then do I rightly understand, that in all these cases of prosecution the initiative must be taken by the Lord Advocate, or some of his staff acting under his responsibility?—No, the initiative may be taken by the local procurators fiscal at their own hands.

13434. Are they appointed by the Lord Advocate?—No, they are appointed by the sheriffs of the respective counties. Although they are under the control and surveillance of the Lord Advocate, in point of fact they are distinct and separate officials, capable of carrying out their own functions. That being the position of matters, when the Mines Inspection Act was passed, which did not give a power to a common informer to prosecute for penalties, it occurred to those interested that the proper prosecutor was a Government inspector, and we understood that that was the course followed in England. So that, when the first case of a prosecution arose under the statute (it was in the sheriff court at Airdrie, district of Lanarkshire), Fiscal against Anderson and Young, and which was referred to by Mr. M'Donald in his evidence, certain objections were taken. The first of these objections was to the title of the Procurator Fiscal at all, on the supposition that the proper prosecutor should have been the Government inspector; and the second objection was, that the Procurator Fiscal, even assuming that he had a title, had adopted an erroneous form of procedure, namely, what might be termed a criminal information or indictment, in place of the form of procedure pointed out by the Mines Inspection Act itself.

13435. *Chairman.*] Will you refer us to the passage of the Act?—The form of procedure for the recovery of penalties against masters and owners

owners is to be found in Clause 25 of the statute of 1860. These two objections to which I have just referred being taken, the sheriff substitute, before whom the case came, repelled the objection to the title of the Procurator-Fiscal to sue, on the ground, firstly, that he was the protector of the public interest; and, secondly, that the penalty when recovered went to Her Majesty's Exchequer, and that he as representing Her Majesty was entitled to sue. With reference to the second objection, as to the form of procedure, it appeared to us to be a very important one, for reasons which I will explain. If the Procurator-Fiscal was correct in adopting the criminal form, then that necessitated the personal attendance of the gentleman charged, at all the diets of court, a thing which might be of far more importance to him than any penalty that could possibly be recovered. Then, secondly, if the Procurator-Fiscal was right in the form of procedure, that deprived the party prosecuted of any right to recover costs, in case he was acquitted; and, thirdly, it deprived him of the right of appeal to the sheriff, a privilege which we greatly value in Scotland. Therefore it was that that second objection was taken. As I stated, the sheriff substitute repelled the objection to the title to sue, and also the second objection, and we went to issue. The trial resulted in a conviction against the accused. Then an appeal was taken to the sheriff, which we contended was a privilege that we would have had, and were entitled to have, under the form of procedure contemplated by Section 25 of the statute, which is a summary proceeding before the sheriff, regulated by a special statute: "All penalties imposed by this Act may be recovered in a summary manner before two justices of the peace, or in Scotland before the sheriff having jurisdiction in the county or place where the offence is committed, in the manner prescribed by the law in that behalf." If the proceeding was properly a criminal proceeding, then we had no good objection; but if we were entitled to be sued for the penalty as a civil proceeding, then the proper form of procedure was totally different from that which was adopted. When that appeal came up, the Procurator-Fiscal objected to the competency of the appeal, because it was a criminal proceeding; the answer to that was that the appeal was competent, because it ought to have been a civil proceeding, and the sheriff after hearing the counsel for the Procurator, one of the Lord Advocate's deputes, sustained the competency of the appeal to him. Then the Procurator finding fault with that, carried the whole case to the High Court of Justiciary, that being the Supreme Criminal Court in Scotland, and there the question discussed was, should this have been a criminal proceeding, or a civil proceeding. The Supreme Court found that it ought to have been a civil proceeding entirely, and therefore found that they had no jurisdiction to touch it. It came back in consequence of that to the sheriff, and as the Supreme Court had found that it ought to have been a civil proceeding *ab initio*, the whole thing fell to the ground. The remark I make upon this is, that there the title to sue of the Procurator-Fiscal was sustained throughout, and the only thing disallowed was the form of procedure which he chose to pursue.

13436. Mr. *Ayrton.*] Are you speaking of the decision in form, or of the decision in substance? —I do not quite appreciate the question.

13437. What was the substantial question decided in the case; was it not a question of form? —It was altogether a question of form; but I say that the sheriff substitute sustained the title of the Procurator-Fiscal to sue, but the sheriff principal and the Supreme Court found that he had followed an erroneous method of procedure by bringing up the parties under a criminal form of information, in place of sueing him civilly.

13438. The Supreme Court decided in substance that it was a civil and not a criminal jurisdiction which it possessed?—Yes.

13439. Therefore, who should have been the prosecutor?—The result of the decision was, that the Procurator-Fiscal should have been the prosecutor, but that he should have done it in a different form.

13440. The substantial points decided by the Court as compared with the question of technical form, were what?—The points decided were, first, that the Procurator-Fiscal had a title to sue if he had adopted the proper form of procedure; but secondly, that he had adopted an erroneous form of procedure, and (in point of form) the decision in the Supreme Court was that they had no jurisdiction in the case.

13441. *Chairman.*] The decision of the Supreme Court is only that the Procurator-Fiscal could not sue criminally?—Precisely.

13442. You infer from its being a decision that he could not sue criminally, that it was a decision that he might sue civilly; but was there any express declaration by the court of appeal that the Procurator-Fiscal might have sued civilly?—There was no judgment in this case to that effect; but I will now come to cases in which that was specially declared.

13443. When you say that the decision of the Supreme Court was that the Procurator-Fiscal might sue civilly, that is your inference?—That is my inference.

13444. If you can inform the Committee of any express decision, that will be more to the point?—That is what I propose to do. I say that in that case which I have cited, the sheriff substitute expressly found that the Procurator-Fiscal could sue, and the sheriff principal found the same thing, and the Supreme Court merely said that the right form of procedure had not been adopted.

13445. Even the sheriff substitute, however, did not decide that he might sue civilly?—No.

13446. Nor has the Supreme Court decided that?—No.

13447. The only decision we have is, that the Procurator-Fiscal could not sue criminally?— The sheriff principal held that he could sue in any case.

13448. That was a decision beyond the limits of the case, because what came before the sheriff principal was the question of the right to sue criminally?—It may be said to have been a mere dictum. I will now proceed to another case: shortly after that there occurred a case in the Sheriff Court at Glasgow, the Procurator-Fiscal against Panton, the owner of a colliery in the neighbourhood, for alleged violation of the 15th General Rule in the Statute, which provides for the having of sufficient bore holes "kept in advance, and, if necessary, on both sides, to prevent inundations in every working approaching a place likely to contain a dangerous accumulation of water;" it was a suit in the civil form, so that the pure question then came up.

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Seeing that we had no express decision (as the honourable Chairman has suggested) upon the question of sueing civilly, we raised the point there again, and the sheriff substitute repelled the objection and there was an appeal to the sheriff, Sir Archibald Alison. He also repelled the objection, the case went to issue, and ended in a conviction under which the defender had to pay penalties.

13449. You did not carry it beyond?—We did not carry it further.

13450. Mr. *Liddell.*] To go back to my original question, assuming that the High Court of Appeal decided that the Procurator-Fiscal could not sue criminally, which I understand was the decision, the Mines Inspection Act is a criminal Act, is it not?—No; the High Court found that the Mines Inspection Act, *quoad* this matter, was not criminal; that distinction arose out of what you will find in Section 22 and Section 25.

13451. I was only going, in justice to Mr. M'Donald, to say that under this very peculiar aspect of things, this rather novel construction placed upon the Act, apparently, at any rate, Mr. M'Donald had some ground for saying that it was inoperative in Scotland?—I do not admit that, but I believe that is a misconception on Mr. M'Donald's part; and I merely wish to clear up that misconception, and show the Committee that there is no difficulty about a prosecution under the Act. The distinction drawn with reference to what is criminal and what is civil in our courts depends upon whether the judgment may be enforced by imprisonment, or not. Now, you will find in Section 22 that certain offences there referred to are to be the subject of a summary conviction, upon which imprisonment *simpliciter* may follow.

13452. *Chairman.*] Do you call this imprisonment *simpliciter*, when it says that the person shall be liable "to a penalty not exceeding 2 *l.*, or to be imprisoned with or without hard labour"?—Yes.

13453. That is to say, it is in the power of the judge to inflict imprisonment instead of a fine if he chooses?—Yes.

13454. And that is your test of whether it is a criminal proceeding or not, as I understand?—That is the test.

13455. Mr. *Liddell.*] It is quite reasonable to suppose that this being a criminal Act in England, that misapprehension in regard to its application in Scotland may have been naturally originated?—It is quite reasonable. If I had thought that the Committee would go so much into the law, probably I would have brought the judgment of the Court with me. But I shall be able to point out by a more recent statute, that the very distinction to which I have referred has been enacted by the Legislature, following out the *rationes* in that judgment of the Supreme Court in Scotland. By Section 28 of the "Summary Procedure (Scotland) Act, 1864," 27th and 28th of Victoria, chapter 53, there is a definition given of the limits of civil and criminal jurisdiction, and there the definition is just precisely what the Supreme Court had set forth in their judgment, but that definition is given in this Summary Procedure Act for the purpose of removing doubts or difficulties.

13456. *Chairman.*] I understand you to say that the test of a proceeding being properly criminal, is whether the penalty is *simpliciter* imprisonment?—Quite so.

13457. And do you say that under Section 22 of the Act of 1860, it is *simpliciter*?—I say that in Section 22 it is, but the offences there are not the offences committed by the master; it says, "If any coal mine, colliery, or ironstone mine be worked, and through the default of the owner or agent thereof, special rules have not been established," (and so forth; it gives a number of the offences), "such person shall be liable to a penalty not exceeding 20 *l.*, and also in case the default or neglect be not remedied with all reasonable dispatch, after notice in writing thereof given by the inspector to the owner or agent of such coal mine, colliery, or ironstone mine, to a further penalty of 1 *l.* per day, during which the offence continues after such notice, and every person, other than aforesaid, employed in or about a coal mine, colliery, or ironstone mine, who neglects or wilfully violates any of the special rules established for such coal mine, shall for every such offence be liable, upon a summary conviction for the same before two Justices of the Peace, or in Scotland before the sheriff, having jurisdiction in the county or place where the offence is committed, to a penalty not exceeding 2 *l.*, or to be imprisoned with or without hard labour in the common gaol or house of correction for any period not exceeding three calendar months." Now if you contrast that with what follows in Section 25, the penalties there are those not specially so provided for, and it is declared that they are to be recovered in the Sheriff's Court "in the manner prescribed by the law in that behalf." The judgment there is not necessarily followed by imprisonment, and imprisonment cannot be substituted in lieu of the penalty. It is purely a civil claim, and it is recoverable by distress and arrestment, or ultimate imprisonment, according to the law of Scotland, but imprisonment cannot be substituted for the penalty by that mode of procedure. This, the Summary Procedure Act of Scotland, 1864, is somewhat similar to what I understand the Jervis Act is with reference to proceedings in England, providing a summary and simple mode of procedure under all statutes for recovery of penalties. There is a clause in that Act (the 28th) defining the limits of civil and criminal jurisdiction in Scotland: "In all proceedings by way of complaint instituted in Scotland, in virtue of any such statutes as are hereinbefore mentioned, the jurisdiction shall be deemed and taken to be of a criminal nature where, in pursuance of a conviction or judgment upon such complaint, or as part of such conviction or judgment, the court shall be required or shall be authorised to pronounce sentence of imprisonment against the respondent, or shall be authorised or required in case of default of payment or recovery of a penalty or expenses, or in case of disobedience to their order, to grant a warrant for the imprisonment of the respondent for a period limited to a certain time, at the expiration of which he shall be entitled to liberation; and in all other proceedings instituted by way of complaint, under the authority of any Act of Parliament, the jurisdiction shall be held to be civil." I refer to that as defining thisd istinction which had been drawn in the litigation I have already referred to. But I will now furnish the Committee with judgments sustaining clearly and distinctly the title of the Procurator-Fiscal to sue.

13458. Mr. *Liddell.*] Is the upshot of all this, that

that in Scotland the infraction of the provisions of this Act by the master is a civil offence, and that the infraction of the provisions by the workman is a criminal offence?—Yes, it is so. I have already alluded to the case of the Procurator-Fiscal against Panton. There it was decided by the sheriff substitute and by the sheriff principal, on appeal, that the Procurator-Fiscal was quite entitled to sue for the penalty. Then there was passed this Summary Procedure Act of Scotland, which expressly enacts, by the 4th clause of it, that "all penalties for the recovery of which in Scotland no provision is made by Act of Parliament may be sued for by the Procurator-Fiscal of the jurisdiction." So that there is statutory provision made for the case.

13459. *Chairman.*] That removes any doubt that there may have been before, you say?—Yes; and I may say that there have been cases decided in the sheriff courts of Glasgow and the sheriff courts of Ayrshire, similar to the case of the Procurator Fiscal against Panton. I observe, in Mr. M'Donald's evidence, that he suggested that the only remedy for the supposed defects of the law in Scotland was some statutory enactment with scheduled forms of procedure. Now, at the very outset of the statute which I have referred to it is said, that "All proceedings for summary conviction for any offence, whether at common law or under any Act of Parliament, and all proceedings for the recovery of any penalty which may be sued for or recovered in a summary form, whether such proceedings are at the instance of a public or private prosecutor or complainer, may be instituted by way of complaint in one or other of the forms set forth in the schedule A. to this Act annexed." Then another clause, section 22, provides that the Procurator Fiscal, in following out the authority given him by this statute, is not liable to costs. So that I take it to be a thing perfectly established in Scotland by these judgments and that statute, that there is every facility for the recovering of penalties under the statute, provided that the Procurators Fiscal do their duty.

13460. *Chairman.*] Who was the defendant in the first case which broke down?—The defendants were Anderson and Young.

13461. The owners?—The owners.

13462. Under the 22nd section of the Act of 1860, the manager of a colliery would be liable to be proceeded against criminally, I presume, for a violation of the special rules?—The special rules do not apply to the master.

13463. But they do apply to the manager, do they not?—Yes, the manager would be liable to be proceeded against criminally.

13464. The head manager?—Any person other than the owner, any person employed in the pit or in the management of the pit.

13465. Supposing that the owner managed his own mines, what then?—I do not know that any special rules would apply to him in that case.

13466. The clause as to special rules speaks of them as being for the "guidance of the persons acting in the management." That would hardly apply to the owner?—Just so.

13467. The result of your evidence is, that you are satisfied that the Procurator Fiscal has the power of suing civilly for the penalty?—Yes.

13468. And that he has the same advantage that he would have in a criminal proceeding of being exempt from costs?—Yes, and that he has the advantage of suing in a simple form provided by that Summary Procedure Act.

13469. Mr. *Ayrton.*] In point of fact, the case would seem to be this, that previous to the Act of 1864 there seemed to be some doubt whether the Procurators Fiscal could sue for penalties where no reference was made to him in a civil suit, he being a criminal officer for criminal pursuit in Scotland, and not for civil pursuit, and that would appear to have been finally cleared up by this declaration made in an Act passed on the 25th of July 1864: "And all penalties for the recovery of which in Scotland no special provision has been made by Act of Parliament may be sued for by the Procurators Fiscal of the jurisdiction." Therefore since that Act has passed there is no question now but that the Procurator Fiscal can sue for the penalty under the Act in a civil suit?—No question.

13470. *Chairman.*] And the case of M'Donald against Young was before that Act was passed?—Yes, and the case of the Procurator Fiscal against Panton was before that.

13471. Mr. *Woods.*] With reference to the question which was put to you just now by the Chairman, having reference to the owners and managers of mines, is it not the fact that by the provisions of the Act in Section 22, that "the owner, agent, or viewer" is liable to a penalty of 20 *l.*?—Yes.

13472. And in Section 10 the general rules are required to be observed by "the owner and agent?"—Yes, I am quite aware of that.

13473. Mr. *Ayrton.*] Do you concur in the view that has been stated in the evidence before us, that it is now the recognized law of Scotland that a workman cannot sue for any of the penalties unless he can prove that he has been personally injured by the violation of the law?—I do, and I am aware of the cases referred to by Mr. M'Donald as supporting that statement.

13474. That is correct, I understand you to say?—That is correct; I may mention, that within the last few days, the Lord Ordinary has, in the Court of Session, adhered to the judgment in the Clackmannan case, referred to by Mr. M'Donald.

13475. *Chairman.*] That is the second case?—The second Clackmannan case.

13476. Mr. *Ayrton.*] It is now the settled law in Scotland, that the workman or common informer cannot sue, but that the only suit can be by the Prosecutor Fiscal, in a civil action?—Yes.

13477. Mr. *Liddell.*] As a member of the executive committee of the Mining Association, will you state whether, under the provisions of this Act, in England, the owner may be criminally convicted upon an infraction of the Act?—In reference to the general rules do you mean?

13478. Yes?—I cannot tell; I never venture across the border on legal ground.

13479. I believe you wish to offer some remarks to the Committee upon Mr. Moore's evidence, given in answer to Question 8125, with reference to arbitration?—Yes; Mr. Moore made certain remarks as to the Arbitration Clause in the Mines Inspection Act being one-sided; I heard the evidence given. He was asked about the practical working of that clause in his own experience, and he mentioned two cases, in one of which the coalowner having nominated five parties in terms of the statute, and a selection having

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having been made by the Secretary of State, the award of the arbiter was in favour of the inspector; and he admitted that that was satisfactory. In the second case the question was still in dependence, and he could not say what might be the result; I had not an opportunity on the spot of reminding Mr. Moore of one or two other cases which I thought were in favour of the view, that the arbitration was satisfactory. A previous witness referred to the arbitration of Mr. Landale, with reference to the special rules established immediately after the passing of the statute. Mr. Landale was said to be a mining engineer, and so to be very much in the position of a mine-owner himself; I have to state that Mr. Landale is a mining engineer of great experience and practice, attending very much to the interests of the lessors of coal, and therefore, it may be supposed, interested in seeing that the best special rules that could be established were established. Mr. Landale issued an award in that case, a duplicate of which I hold in my hand, and which sets forth the deliberate procedure that took place under the arbitration, and how he discussed the matter with the two Inspectors for the Government, representatives for the coalowners, and Mr. M'Donald, the secretary for the miners, and two other parties as representing the miners, and he issued an award modifying to a certain extent one of the special rules, No. 3. Probably I may put in that award.

13480. *Chairman.*] With a view of showing the satisfactory working of the arbitration, I suppose?—Yes (*the Witness handed in the award*, vide *Appendix.*)

13481. Mr. *Ayrton.*] As a general question, supposing that you had a controversy with a person, would you like that person to nominate five arbitrators and leave you to select one of them?—Certainly not. I will explain the case. I do not know whether the Committee will think this a relevant statement or not which I am about to make, but they will judge for themselves. I had a good deal to do with the framing of the arbitration clauses in the Act, and had many interviews with the then Under Secretary of State, Mr. George Clive, along with the late Mr. Nicholas Wood, the president of the Mine-owners' Association, on the subject of these clauses, when that very matter was under discussion, and with Mr. Coulson, the legal gentleman who made the draft. We put it in this way; this was not a question between two men, as to the right of one, and the liability of the other, which might be taken into a court of law, or by the consent of the parties before an arbiter, and where it might be quite fair that each should select a man; neither was it a question with reference to the enforcing of a penalty under the general rules, or any other part of the statute, but it was a question as to how much interference was fair and reasonable with the operations of the proprietor of a colliery. That being so, we pressed upon the then Government that it was a reasonable thing that the master should have a much larger power in the controlling of the constitution of the court which was to regulate the management of his property than an ordinary party naming an arbiter to decide a disputed question, and upon that an adjustment was brought about by the settlement of the clause as it now stands. I was going to point out with reference to Mr. Landale's award that I rather think Mr. M'Donald has made an inadvertent mistake in putting into the hands of the Committee, as the existing rules in Scotland, the rules as they were before they were altered in consequence of that award; at least I so read the evidence; I may be under a mistake. It is at Question 7182.

13482. *Chairman.*] Mr. M'Donald speaks of the reference to the umpire in these terms: "In 1856 a representation was made to the Home Secretary by over 8,000 workmen, and he appointed as referee a Mr. Landale, in Edinburgh, who made a slight alteration in one of the special rules, but these special rules still remain unsatisfactory." Was it a slight alteration or a great alteration, in your opinion?—I will put in the old rules and the new rules, and the Committee will judge for themselves (*handing in the respective rules to the Committee*); you have the award, you have the rules objected to, and you have the rules ultimately adopted, before you.

13483. You say that that answer of Mr. M'Donald's is not a correct statement of the results of the arbitration?—I say so.

13484. Mr. *Liddell.*] May I ask whether Mr. Landale's appointment as referee by the Secretary of State was satisfactory to the workmen?—I am not aware that any objection was ever made about it. I may explain, however, that it took place immediately before my becoming Secretary to the Associated Mine-owners, and therefore I cannot speak so decidedly upon it.

13485. Is Mr. Landale in a position to inspire confidence on the part of the whole body of workmen in Scotland?—I would think so, decidedly.

13486. Mr. *Ayrton.*] Can you suggest any way in which you could inspire the workmen with confidence in the proceedings of an arbitrator, when that arbitrator was selected by the masters only?—The question put to me by Mr. Liddell was whether Mr. Landale was such a person as to inspire confidence, and I say that he was; but whether he actually inspired it, I cannot tell.

13487. I meant (as to the principle of the thing, and not as to the particular individual) to ask whether you could offer any suggestion which should result in inspiring the workman with more confidence in an arbitration than would seem to exist, when there was no one to represent the working element in the arbitration?—It would be exceedingly difficult to suggest any practical solution of that question, because you are placed in a dilemma if you go too far in the way of depriving the master of that reasonable control over the management of his works which I have already referred to. I am not able to suggest any practical mode of making the arrangement better than it is.

13488. Mr. *Liddell.*] Will you refer in Mr. M'Donald's evidence to Question and Answer 7206—Mr. M'Donald says: "We think that the special rules should be framed, and lodged with the sheriff's clerk of the district; and that instead of being submitted to a mining engineer where it is a question of law and contract, the parties should be heard in a cheap and easy form before the sheriffs of the district, and copies of the rules should be kept by them." I should like to ask your opinion upon that suggestion of Mr. M'Donald's, as to whether you think it would work?—Not at all.

13489. Why not?—My practical experience (and I have had a good deal of it) for the last 10 years, in courts, in questions with reference

ence to the working of mines, is that it is exceedingly difficult to make a person comprehend these details who has not had practical experience; and to go before a sheriff to form special rules for the working of a colliery, seems to me altogether out of the question.

13490. The tribunal itself, you think, would be an incompetent one for the decision of such a question?—An inexpedient one.

13491. But would it be incompetent?—It would be incompetent in the sense of not carrying out the thing intended.

13492. Would the questions which arose be such that the judge, or the person who presided over the court, from want of familiarity with those questions, would himself have a difficulty in coming to a decision?—That would be so. It is quite a different thing for a judge to deal with matter of that kind *ex post facto*, upon evidence of facts, and to deal with these matters *à priori*, by anticipation, as it were. No man can do the latter, in my apprehension, without a very considerable amount of practical experience and knowledge.

13493. In fact, you think it is only a mining engineer who can deal with questions at that stage of the proceedings?—A mining engineer, or a gentleman conversant with mining work. Perhaps the Committee will allow me to add a few remarks with reference to Mr. Moore's opinion that the arbitration clause was unsatisfactory. He spoke of two cases in which he had found it so far satisfactory; I took an opportunity to remind Mr. Moore of another case, that of my Lord Belhaven, under the Mines Inspection Supplementary Act (that is the statute about having double shafts), where, out of the five gentlemen presented as nominees of Lord Belhaven, the mine-owner, Mr. Moore had the opportunity of choosing his own brother, Mr. William Moore, mining engineer. I put the question to him—"Was that satisfactory?"—and he said—"Quite satisfactory." I mentioned to him another case, under the same Supplementary Act, with reference to extension of the time for making the double shaft, in the case of a gentleman called Mr. Roxburgh. The nominee selected by the Home Office was a Mr. Meiklehan, and Mr. Meiklehan's judgment was against the mine-owner; that case, therefore, was also satisfactory. I reminded him of another case, of Messrs. Merry and Cunningham, asking for an extension of time, and where a Mr. M'Creath was chosen as the arbitrator out of the five nominees; and I will take the liberty of reading a very short correspondence, two letters that passed on the subject of the award of that arbiter, showing that Mr. Moore was satisfied. (*The Witness read the letters.*)

13494. Mr. *Ayrton.*] With reference to this award which you have put in, I find that the arbitrator allowed this to stand in the rule: "and shall obey the orders of the underground manager or oversman placed over them" absolutely. Do you consider that that is a proper special rule?—Yes, I consider it a proper special rule, just as every servant must obey his master. He is not to obey to the extent of injuring himself. If he sees that to obey a command would be injurious, neither he nor any other person is obliged to obey; but it is a general proposition that he is to obey the manager as standing in place of the master.

13495. And that he is to be subject to imprisonment without reference to the safety of the pit or of any workman, on mere disobedience of an order?—I do not suppose that any court or judge before whom a party was brought upon a complaint for violation of a rule such as that would ever find that he had committed a breach of the rule if he could give such an excuse for not obeying it, as is pointed at in the question.

13496. Mr. *Woods.*] I suppose that underground in a mine there are special reasons why persons who go there as servants should obey the manager's orders?—No doubt of it.

13497. Mr. *Ayrton.*] Section 11 of the Act, you observe, says, "In addition to the general rules, there shall be established and observed in every coal mine, colliery, or ironstone mine, such other rules (hereinafter referred to as special rules) for the conduct and guidance of the persons acting in the management of such coal mine, colliery, or ironstone mine, and of all persons employed in or about the same, as under the particular state and circumstances of such coal mine, colliery, or ironstone mine may appear best calculated to prevent dangerous accidents." Looking to that clause, do you not consider that such a special rule as that introduced by the decision of the arbiter is a complete evasion of the Act, and a most unjust rule to put upon a workman?—No, I do not think that.

13498. Is it not the intention of the Act that the rule should be specific as to the acts that are to be made penal on his part, and that they should have some bearing on the safety of the mine; and is there any power in that 11th clause such as this special rule contains?—Disobedience to the orders of an underground manager may involve "dangerous accidents."

13499. But that disobedience is made wholly independent of the safety of the workman in the amended rule, is it not, as it now stands?—No, I think not.

13500. *Chairman.*] Will you read the rule as it now stands?—The special rule, No. 3, is in these words, "Besides the intimation of apparent safety given by the firemen, colliers must satisfy themselves of the safety of their working-places before commencing to work, either at the beginning of a shift, or after any interruption of working during a shift, and shall obey the orders of the underground manager or overman placed over them, in all matters relating to their work, and the ventilation and safety of the pit."

13501. Mr. *Woods.*] Are there not in a mine a variety of details which do affect the safety of persons in life and limb, which it is impossible to insert in a written order?—No doubt of it.

13502. And those words would refer the matter to the discretion of the overman at the moment?—Quite so.

13503. And is not that a fair interpretation of their object and intention?—That is a fair interpretation, according to my view.

13504. Mr. *Ayrton.*] Do not you conceive that the arbitrator, in settling the rule in the form he did, really made no alteration at all substantially in the rule?—I think he made a considerable alteration.

13505. *Chairman.*] Will you now read Rule 3, as it stood before?—The original rule was in these terms: "On beginning work at every shift, and which colliers shall be bound to do as soon as they shall have entered, and satisfied themselves concerning the safety of their working places (which it

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shall be their duty to do independently of the fireman's report), they shall thereupon work at their appointed coal-faces continuously, industriously, and without unnecessary intermission while the shift continues, and shall obey the orders applicable to the safe and proper prosecution of the colliery works given them by the underground manager, or other person for the time placed over them." That rule is struck out, as it was one carrying the matter of obeying the orders, apart from anything else, too far, perhaps.

13506. Mr. *Ayrton.*] But if the oversman choose to give the men any order under the rule as it now stands, then the violation of that rule would subject them to penalties?—Certainly not.

13507. Would he not be entitled to give an order to the men to work continuously and without intermission?—Reasonably.

13508. Under the rule?—No; I do not think that any mere question of a man working or not working as a matter of contract, apart from something connected with the operations of the pit, and affecting its safety or the safety of the men, would fall under the rule at all. That is the view I take of it, and I never have had, in my experience, any question raised under this special rule at all, or any attempt to show that a man might violate the rule by any mere difference about working or not working.

13509. Then your construction of Rule 3 is, that the order must apply to the whole of the three things mentioned in the latter part of the rule, namely, to the things "relating to their work, and the ventilation and safety of the pit"?—If I were sitting as a judge I would so construe it, and I never would attempt, as a legal person, to argue the contrary.

13510. Then you think that if it did not relate to the ventilation of the pit, but to fire-damp, the order would not come under the rule?—"Safety" would cover that.

13511. The words must either be taken distributively or collectively. Those words are: "Colliers shall obey the orders of the underground manager or overman placed over them in all matters relating to their work, and the ventilation and safety of the pit." Now if you take the words distributively, any disobedience of an order might be a violation of an order "relating to their work." If you take them collectively, then an order merely relating to the safety of the pit would not necessarily come under that special rule; in which way will you put it?—I would say that if it related merely to something affecting general work it was not under the rule at all. I would say that the conjunction "and" might have been left out and "or" substituted for it; but in reading the rule I would say that the thing that the workman was doing either affected the ventilation or the safety of the mine in some way or other, and I think that the mode in which the words are connected by the word "and" is rather in favour of the party offending, because if you deal with it critically it must refer both to the ventilation and to the safety.

13512. And that is an impossible construction?—That is not a possible construction, perhaps.

13513. Therefore you would have to take the three terms distributively?—That is what I say.

13514. And one of the terms is "in all matters relating to their work"?—I cannot view it in that light at all.

13515. Do you think it is a reasonable thing to make special rules in this way, not pointing to any particular matter that is to be attended to?—As I said, in answer to a question put to me by Mr. Woods, there are such a variety of matters to be attended to in the working of a mine that it appears to me impossible to define them in detail.

13516. Mr. *Woods.*] I spoke in my question of a variety of matters affecting the safety of the mine?—Precisely.

13517. *Chairman.*] You consider that the duty of obedience, or the obligation or necessity of obedience, applies equally to all mines, do you not. No mine can be conducted safely unless the workmen are obedient to the viewers, or those over them, in matters relating to the safety of the mine?—I cannot speak of mines of all descriptions from any practical experience; but I should say that this applies to ironstone mines and coal mines.

13518. In all mines where there is a liability to explosion, or a liability to falling of roofs, the duty of obedience applies equally, does it not?—I should think so.

13519. The orders to which obedience should be given may vary in each mine, I presume?—Yes.

13520. But the obligation of obedience is general and universal?—Yes, quite so.

13521. If it is general and universal, and if the breach of it had been meant to be punished as a criminal act, do not you think that it would have been properly made the subject of a general rule?—That involves an inquiry, whether the things contained in the special rules should not have been embodied in general rules.

13522. The duty of obedience being general, though the orders to be obeyed may vary, do not you think that, if it had been the intention of the Legislature to make disobedience in a working collier a criminal act, the Legislature would have put, as an additional general rule, something to this effect: "Wherever a collier shall disobey any order having reference to the safety or ventilation of the mine he shall be liable to be punished criminally." How do you answer that objection?—It is scarcely a question as to the propriety of the rule; it is rather a question whether or not it should have been a general rule; that is to say, it is not an objection to the nature of the rule itself so much as that it should have been a general rule.

13523. It is an objection to the authority under which it was made. If you refer again to the clause on the subject you will see that the special rules are to have reference to the special circumstances of the particular mine; do not you think that that clause has reference to this fact, that in some mines it would be requisite to make strict rules about lamps, for instance, while in others it would be requisite to make strict rules about propping; and do not you suppose that the special rules referred to in that clause should have reference to definite acts to be done, but which the Legislature cannot describe, and not have reference to the duty of obeying orders, which is a matter for a general rule and a matter of general obligation?—My answer still would be, that the question did not so much point at an objection to the nature of the rule as being unnecessary, as at the fact that it should have appeared in the general rules instead of in the special rules. It may be a very nice question whether, looking to the terms of

of Section 11 of the Act, a particular portion of the special rule referred to is borne out or not; and that is one element that would go, I think, to protect any man charged with mere neglect of duty, and which had not some special reference to the safety of the mine.

13524. You would not object to such a limitation as that the disobedience should only be made criminal, provided that the order disobeyed had reference to the safety of the mine; that is all you want?—That is all.

13525. You do not wish disobedience to other orders, as to a man doing his work, for instance, to be criminal?—Certainly not.

13526. Assuming that to be the meaning and the intention of the arbitrator, do you think that it is quite clearly limited in that way in the new rule?—Critically, one may say, perhaps that it might have been more precise and definite; but a Court in dealing with it would necessarily look to the clause under which the rule was framed, and that would control the meaning put upon it. Now let me make this remark, that this objection to the rule is quite new. If you look at Mr. M'Donald's evidence you will find that the objection taken by him, and said to be taken by the men, has not reference to that point at all, but to the notion that Rule 3 imposes upon them certain responsibilities for the safety, and exonerates the master; I propose to speak to that by-and-bye, in order to show that that is not the meaning of the rule at all.

13527. Mr. *Liddell.*] This question now arises, very naturally, upon your last answer. Am I not right in supposing that the general rule applies solely to the owners and the agents?—All the general rules do.

13528. And the idea that any special rule exonerates the master is an erroneous idea, because a special rule is equally binding upon master as upon men?—It is quite an erroneous impression that any special rule could override and do away with a duty imposed by the general rule.

13529. With reference to arbitration, Mr. Moore told the Committee that he had been deterred from proceeding to arbitration, in more than one instance, by his distrust of the tribunal. His experience of the tribunals did not quite bear out, as I thought, the views which he took upon that subject; but I want to ask you your opinion as to his suggestion for a change. He suggests that the tribunal should be composed of one arbitrator, chosen by himself, as the inspector acting under the Secretary of State, and of another arbitrator chosen by the coal owner; those two persons to select the umpire. Will you state your opinion as to what the working of such a tribunal as that would be, whether it would be satisfactory to the master, and whether impartiality could be expected at the hands of such a tribunal?—The result of it, in my opinion, would be that you would have two men appointed, each of whom would represent the party appointing him, and that the tribunal would ultimately consist in the umpire appointed by these men; and I think that it would be most unsatisfactory, looking to the subject-matter of the arbitration.

13530. Do you think there would be great difficulties, in the first instance, in the way of the two persons coming to any agreement in the choice of the third?—I have found that that is obviated very often by their appointing the third party before they proceed to discuss the matter between themselves. I am not alluding to arbiters under this statute, but that is a general observation.

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13531. Have you ever thought whether the choice of an arbitrator in such a case as that might be left to some wholly independent person, either a judge or chairman of quarter sessions, or any person in that position?—No, I cannot say that I have considered that question.

13532. Do you know whether Mr. Moore or any other Scotch inspector, has preferred complaints of the constitution of the court of arbitration?—I never heard it complained of until I heard it from Mr. Moore in this room a fortnight ago.

13533. And you yourself are satisfied with the present procedure by arbitration?—Yes; that is to say, not I personally, but the coal owners, for whom I come here. Speaking on behalf of the coal owners, I am satisfied with the constitution of the tribunal under the existing law.

13534. And you are unable to suggest any improvement?—And I am unable to suggest any improvement consistently with the rights of the coal owners.

13535. Mr. *Ayrton.*] With reference to the observation which you made just now, that the workmen's objection to the rules stated in Mr. M'Donald's evidence was different from the one which has been raised to-day, will you, on looking at the rule, again direct your attention to the fact, that the first part of the rule, though special in its character, is not so general in its terms as to cast upon the workman all the responsibility for the safety of the mine?—I do not think it casts on the workman all the responsibility for the safety of the mine.

13536. I mean that part of the mine that he is working, and so far as his work is concerned?—No; not even limiting it in that way, because the fireman is under an obligation, by another special rule, to visit that place in the morning. While the operations are going on, the collier may have occasion to leave the working place for a time, or he may not have gone to his work till some time after the fireman has been there. Now, that cessation or interval renders it necessary that he should, as a precaution, also look to the state of the ventilation, and I may say that I never heard any attempt to put upon this rule a construction that it imposed a responsibility upon the workman for neglect of which he might be punishable, or that it relieved either the master or the fireman from responsibility.

13537. But is it not the fact that the workmen objected to the rule being couched in such general terms; that, in fact, instead of the rule indicating how they were to satisfy themselves, or what was to be done in this matter, the rule was in such general terms that the responsibility was in reality put upon them?—I do not know, not having taken part in the discussion what the nature of the objection was which was stated by them at the time; but I may say this, that although there was no provision made for hanging up the special rules under the Act of 1855, before they were sent up to the Home Office, such provision was made in the Act of 1860; and I have repeatedly had occasion to apply for the establishment of special rules for new pits where they must necessarily be hung up before they were adopted, and in no case in my experience has anyone come forward to object to those or any other special rules.

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13538. Are all that you have seen as general in their terms as this?—These are the rules that apply almost throughout Scotland; and I may call attention to the fact, that there are large districts in England where they have similar special rules, very near, in fact, to the same thing. I hold in my hand the special rules for the Ince Hall Collieries, which, I believe, are in the Wigan district, and which represent what are the special rules adopted there generally, and their special rule, number 4, is in these terms: "Work persons to examine.—In addition to the examination by the under-looker, or fireman, each work person must satisfy himself of the safety of his own working place before commencing, and whilst at work."

13539. *Chairman.*] There is nothing there about being punished for disobedience?—I am reading the rule just as it stands. The question recently put to me was confined to this matter of examination, and therefore I read Rule 4, but if the question had applied more generally I would have read another rule, number 1, "Orders, and where to go.—Every work-person shall obey the directions of the underlooker, fireman, and other officer; he shall work only where directed, and shall not go into any part of the workings, except such as he may necessarily pass through in going to or from his work." That is a special rule in the large district to which I refer, and it was adopted, I believe, after, and in consequence of an arbitration.

13540. Mr. *Ayrton.*] But those orders are precise, that is to say, with the exception of the general language, the order would seem to be precise?—"Every work person shall obey the directions of the underlooker, foreman, and other officer." That is very similar to what is in our rule.

13541. But in other respects that rule would be precise?—In other respects it would be more precise than the Scotch rule, that is to say, it contains more than the Scotch rule does.

13542. Does it occur to you that the effect of making general rules of this sort is to put upon the workman that very responsibility which it seems to have been the intention of the Act to put upon the owner, because the workman then is made the judge, whether the rule is applicable or not?—It is an exceedingly difficult question altogether; but if there be occasion for the workman to make an examination, either at the commencement of the work, in the way I have described, or at intervals, from the causes which I have mentioned, I do not see very well how you could define the particular thing that he was to do.

13543. You will observe that the rule which you have just quoted from the Ince Hall Colliery's Rules is precise: it says that the workman, when ordered, must go to a particular stall, or take a particular course, and that, therefore, is a special and precise rule; in the same way could not that rule of yours be made special and precise with reference to what the miner has to do for safety, because how can a collier be the judge of the safety of a mine unless he has instructions given him?—I think that the question arises out of a little misapprehension; the matter which we started with, was the examination of his own place by the collier; how much more precise could you make that, I would ask.

13544. It is not a question of what he should do, but what he should be punished for not doing, and, whether, if he is to be punished for not doing an act, the act itself should not be stated with such precision as not to throw upon him the responsibility of a general judgment on the subject matter; you see the distinction, I presume?—I see the distinction, but it is exceedingly difficult to make the rule more precise.

13545. That was the contention raised with reference to this rule it would seem, namely that the language was such that it was a begging of he question, and that it would therefore put upon the workman the responsibility of a general judgment?—I can only say that as the result of ten years' experience, I never have heard a master or coal owner attempt to exonerate himself under such circumstances as are alluded to in that rule, or say that he was free, although the fireman or he himself had not done his duty.

13546. Mr. *Woods.*] The rule says, "or after any interruption of working;" is it not the fact that after interruption of working, say for the dinner hour, it would be necessary in a fiery mine for somebody to investigate the place before work began again?—I believe it would.

13547. And if the man failed to make that investigation on going in he might easily do some act by which he would explode the mine?—Quite so.

13548. Is it not the fact that the practical care and guardianship of that drift or place, and, in many cases, the advancing of the brattice which conduces to the good ventilation of the mine, are dependent upon that man during the day?—I believe so.

13549. Is it true that if he failed to make his examination, or if he failed to obey the orders of his overman on these small details, he probably would, in the case of a fiery mine, explode it?—I believe so.

13550. Then you will agree with me, I suppose, that rules with reference to those minute circumstances which I have described are not, in any sense, rules relieving the owner of the mine from a responsibility which properly sits on his shoulders?—I agree in that view.

Monday, 9th July 1866.

PRESENT:

Mr. Ayrton.	Mr. Liddell.
Mr. Clive.	Mr. Neate.
General Dunne.	Mr. Powell.
Mr. Wm. Orme Foster.	Mr. Hussey Vivian.
Mr. Kinnaird.	Mr. Woods.

CHARLES NEATE, Esq., IN THE CHAIR.

WILLIAM BURNS, Esq., called in; and further Examined.

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13551. *Mr. Liddell.*] AT the close of the last day's inquiry you were engaged in explaining certain points in reference to the special rule No. 3. Perhaps you will resume your remarks upon that rule?—Yes; I have one or two remarks more to make upon it I find, in answer to Question 7202, the witness, Mr. McDonald, saying that cases occur frequently in courts where the effect of that rule is to throw upon the workmen the *onus* of an accident in place of its resting with the master or his officials. Upon that I remark that in my experience of 10 years, during which I have been acting for the masters, in almost all the cases that arise out of these accidents, I have not known any such case.

13552. I believe you wish to make an observation upon the answer to Question 7185?—Yes; I find it there stated that there have been no special rules established in Scotland since the Act of 1855. I wish to call the attention of the Committee to the fact that while in this Act of 1860, special rules already established need not be innovated upon, that applies to old collieries, and every new colliery that is opened must necessarily, under the Act, have its special rules adopted and approved of.

13553. *Chairman.*] Supposing that a new colliery were established within a district where the rules of 1855 existed, what then?—I will come to that point. Upon that fact to which I have just alluded, I have to remark again that, acting for the masters, I have had occasion, since the passing of the Act of 1860, to apply for the approval of special rules for new collieries, which special rules were hung up in terms of the statute, and no objection in my experience has been made to them. The question of the Chairman suggests this remark, that we look upon a colliery in the sense of the statute as being pits, one or more belonging to a particular owner in a particular locality. The fact of special rules being established in that colliery does not imply that they are the special rules of any other person's colliery, but we do not consider it necessary to have a new set of special rules for an additional pit or pits in the same person's colliery.

13554. Mr. *Liddell.*] Unless, I suppose, it should occur that there are some special circumstances connected with the working of the coal, or other natural circumstances connected with that particular colliery which required to be met by a special rule?—If there were such a case the master would find it his interest to have appropriate special rules; but we do not consider it necessary under the statute, unless we see such special cause. There is just one other observation I was going to make arising out of the Honourable Member for the Tower Hamlet's criticism of the rule in the course of the last examination, and that observation is this, that if it be considered that that special rule, as framed, (being No. 3 in the Scottish List and No. 1 in the English List, which I had the honour of laying before the Committee), goes too far, in covering the question of general disobedience apart from the safety or working of the mine, then, as obedience in mining operations seems to be admitted to be an essential matter, I would suggest that the thing is to be cured by a general rule, which would cover all such cases.

13555. Do I rightly understand you to suggest that a general rule, having the scope and object of that special rule, ought to be framed and inserted in the present Act, or added to it?—I do not make that suggestion, because I consider that the special rule, as it stands, is not open to objection. I merely say that if the rule, as it stands, is open to objection, and if the element of general obedience cannot with propriety be inserted in a special rule, it ought to be inserted in a general rule.

13556. I understand you to say that no legal objections of the nature of that taken by the Honourable Member for the Tower Hamlets have as yet been taken to that special rule?—The objection was also taken by the Chairman, I think, and no practical question of that kind has arisen within my experience.

13557. In an answer which you have lately given, you said, I think, that since 1860 a considerable number of special rules have been framed, but no objection has been taken to any one of them?—I stated that I had had cases of that kind.

13558. Then do I rightly understand that those special rules were in all cases adopted with the full consent and sanction of the inspector of the district, and that no objection was taken to them on the part of any of the workmen?—Quite so.

13559. Is it usual, in framing special rules, to consult the workmen, or anybody representing the workmen?—It is not usual; I may explain that the special rules generally existing in Scotland, a copy of which I laid before the Committee, have existed since 1856, with the amendment made

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made upon them under the arbitration by Mr. Landale, and therefore all that is required is to hang up these rules at any colliery where it is proposed they should be established, for 14 days, in the terms of the statute, in order that objections may be made, if any exist.

13560. And during that period so assigned by law, it is open to any workman to raise any objection that he may think fit to such special rules?—Quite so.

13561. Supposing that a workman actually did so, what would be the course taken?—If a workman raised an objection, that would naturally be communicated to the Government inspector. In all cases, as I understand, when special rules are sent up to the Home Office for approval they are remitted to the inspector for his opinion; so that in returning that opinion the inspector would have an opportunity of stating the objection which the workman had made.

13562. Then the medium of representing the workmen's opinion in all such cases is the inspector?—Not necessarily; they may make their representation direct to the Secretary of State.

13563. *Chairman.*] With the exception, then, which you mention as to new collieries, it is true that the special rules now existing in Scotland, are the rules established under the Act of 1855, with the modification of the third special rule under the arbitration?—With a modification of the third special rule, and with certain additional special rules, rendered necessary by the new statute, with regard to the payment of wages and other matters.

13564. That is to say, with some slight additions which we need not go into?—Yes.

13565. The statement of Mr. M'Donald, then, is generally true, with the exception of the new collieries?—With the exception of the new collieries.

13566. General *Dunne.*] Are the same rules established in the new collieries?—They are.

13567. *Chairman.*] You adopt, that is to say, in the new collieries generally, the rules of the Act of 1855?—Precisely.

13568. Then, Mr. M'Donald's statement is very near the truth as to that point?—I can scarcely say that.

13569. Will you explain in what it is not correct?—The incorrect statement is, that no new special rules have been adopted in Scotland since that time, giving the opportunity of an objection. The error consists in putting it in this way, that the rules as established in 1856 remain the rules, without any other opportunity of stating an objection. That is the inaccuracy, though I think it is an inadvertence.

13570. General *Dunne.*] When the rules are adopted in the new collieries, are they hung up?—They are.

13571. Mr. *Vivian.*] And not only that, but, as I understand you, new rules have been grafted upon the old rules?—They are identical, with the addition of the rules rendered necessary, about payment of wages.

13572. Then, as a matter of fact, new rules have been grafted upon the old ones?—Yes.

13573. *Chairman.*] With reference to the difficulty that I suggested about the obligation of obedience, that difficulty arose from the clause of the Act of 1860, only empowering special rules to be made with reference to the particular circumstances of the mine, I ask you, as a lawyer, whether you do not think that that difficulty might be got over by adding, in Clause 11, after the words "as under the particular state and circumstances of such coal mine," and so on, these words "or with a view of carrying into effect the intentions of the Act;" you might give a general power of that kind in the 11th clause, might you not?—I may say, in answer to that question, that if this objection, which I heard for the first time at the last sitting of the Committee, had been brought under the notice of the parties, I have no doubt they would have obviated the objection by a correction of the rule, although I never saw it produce any practical results. And that I am not merely saying that on the spur of the moment, is evident from the circumstance that being examined as a witness before the Committee, presided over by my Lord Elcho, I had occasion to express, some weeks ago, the very same view as I have expressed now of the effect of the 11th section of the Act upon what should be the terms of the special rule. The inquiry of that Committee had regard to the subject of the law of master and servant, with special reference to the Statute 4 Geo. 4, c. 34. It had been suggested by Mr. M'Donald, in the course of his evidence before that Committee, that that general statute was unnecessary, so far as regarded men and parties employed about mines, because of the existence of these special rules. I was asked my opinion on that subject, and while I spoke otherwise about it, I made these remarks, "But, apart from that, I do not think that these special rules, even as regards the department of mining, are calculated or intended to supersede the general law; they are framed under a section of the statute which limits the extent to which the special rules may be carried. Section 11 says that, 'In addition to the general rules, there shall be established and observed in every coal mine or colliery, or ironstone mine, such other rules (hereinafter referred to as special rules) for the conduct and guidance of the persons acting in the management of such coal mine or colliery, or ironstone mine, and of all persons employed in or about the same.' Now, I apprehend, if it had been attempted under that enactment to introduce into those special rules for the collieries the power of punishing men for misconduct or misdemeanor, in respect of a breach of contract; for example, an engineer not coming to his work under his contract, it would have been objected to by the Home Office at once as not within the provision of this statute." That explains the view I take.

13574. Mr. *Woods.*] Do not the last words of that section make it quite patent and clear what was its object, namely, the establishment of such special rules "as may appear best calculated to prevent dangerous accidents"?—I think so, and I think I said so at the last sitting of the Committee.

13575. The last words of the section entirely limit its application?—Precisely, and when you come to interpret or read the special rules they must be read with reference to that clause.

13576. Mr. *Liddell.*] In the event of any question arising in a court of law, involving the consideration with which we are now dealing, would the general law override any special rule framed under the provisions of the Act of 1860, supposing that the two were found to clash?—I have no doubt of that whatever.

13577. Has any case of that kind ever occurred?—None that I am aware of.

13578. But,

13578. But, I suppose, it would be held that a special rule framed under the provisions of an Act of Parliament, would not have so direct a legal bearing as any enactment contained in an Act of Parliament?—I have no doubt of that.

13579. I will call your attention to general rule, No. 1, with reference to the words, "under ordinary circumstances;" you wish to make an observation upon that phrase, I believe?—Yes; again I may observe, that I do not know whether it is quite legitimate for me to say anything about the considerations upon which this general rule was adopted, but if it may be permitted I will do so. As I stated at the last sitting of the Committee, I acted very much for the mine-owners in adjusting these rules with the Secretary of State, or the Under Secretary, at the time when the Act was passing, and this was matter of very grave and deliberate discussion, and ultimately, the words "under ordinary circumstances" were introduced upon the representation of the masters, that many incidental occurrences might take place in a mine to disturb the system of ventilation for which the masters could not be properly blamed. Now, I may illustrate that by two cases which occurred in our courts in Scotland, for perhaps that is the best way of explaining it; in a case of Phillips against Roxburgh, which originated in the Sheriff's Court at Glasgow, and was carried by advocation, as we call it, to the Supreme Court, the circumstances were these; there were two men working in an upper seam, the pit being in course of being opened, and there were a number of men working in an under seam; it was supposed that matters were so arranged that the ventilation of the upper seam was not necessarily dependent upon the condition of the ventilation of the under seam; the underground manager, in the course of some operation in the under seam, had taken out, temporarily, a piece of bratticing forming the air course; an explosion occurred immediately in the upper seam; it became a contention whether this was the cause of the accident, and the court ultimately came to the conclusion that it was the cause of the accident; but they held that the master was not liable in damages to the parties injured there, and by inference, that he would not have been liable to the penalties under this 1st Rule, because the court found that he had adopted the most careful system of ventilation, and that this was a thing which happened out of the ordinary course of circumstances.

13580. That is to say, that the pit was in an extraordinary condition at the time?—Yes; caused by an incident over which the master could scarcely exercise any control. So the court acquitted the master entirely, but they found the manager responsible. That appears to me an illustration of the cases which may come under this general rule, of a want of ventilation temporarily, out of the course of ordinary circumstances.

13581. It would hardly be becoming, perhaps, in any member of this Committee to try a question of that kind over again; but did I rightly understand you to say that in the working of the lower seam a portion of brattice had been removed from one of the air courses by a person charged with the management of that part of the pit?—Yes.

13582. And in consequence of that act of the manager the accident occurred in the upper seam?—Yes.

13583. And yet the court held that though the accident had occurred from that act, the owners were not liable for the consequences of the explosion?—It was so; and that raises a question of law, which has been discussed a good deal in Scotland, and also in England, and I apprehend you will find that the same judgment would be pronounced in England, on the principle that these men were collaborateurs. There was a famous case brought from Scotland to the House of Lords by appeal; previous to that, our courts were in the habit of holding owners liable for anything that persons in their employ did. We brought a case to the House of Lords, the Bartonshill Colliery Company against Reid, and the House of Lords, reversing the judgment of the Scottish court, found that the master was not liable for the death of two men, caused by the engineer bringing them up over the pulleys, and throwing them out of the cage.

13584. *Chairman.*] That is to say, caused by overwinding?—Yes, overwinding. The House of Lords found that, it being admitted that the engineer was a man of skill, carefully chosen for the purpose. In the case to which I was referring just now, it was established that the underground manager was a skilful man, and experienced, and that no blame attached to the master for his employment.

13585. Mr. *Liddell.*] But does not that view so taken of the law inevitably tend to this result, that a man once selected for his known skill and capabilities may commit an act for which the owner of the colliery is not liable?—That may be so; just as a person employed on a railway, or in a ship, or in many of the various departments of business, may commit an act for which his employer is not liable. It is not a law specially applicable to miners or mine owners; it is the general law of the land, applicable to all employers and employed.

13586. Does the law, or does it not, hold that a master is liable for the acts of his servant?—Not necessarily, in the case of fellow-workmen, but necessarily in the case of a stranger.

13587. If a coachman drives over a man in the street, the employer of that coachman is liable for that act?—Yes, and the principle upon which the law is laid down so strongly in the Bartonshill case is this, that fellow-workmen entering into a common employment, know that they are subject to certain accidents, and among other accidents, to the possible negligence or want of nerve, or something or other, on the part of any person employed along with them, and they are held to take the risk of those accidents if it be the case that the master has done his duty in selecting a proper person. I would now refer to another case tried in the Supreme Court of Scotland before a jury, Conor against Kidston, where a boy was killed in passing along the main road from the pit bottom. The fireman had examined the place previous to any of the men going in, and other workmen had passed along the same road very shortly before the accident occurred, but an explosion did take place in that road, and the lad was killed. That raised a question about the state of the ventilation. There was nobody there who could give evidence upon the subject, but it was found immediately after the accident that a fall of stone had taken place from the roof. There was no evidence as to whether that fall took place before the accident, or whether it took place in consequence

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consequence of the accident, but the jury took the view of it, that it must have been the cause of the accident; that the fall had taken place after the other men had passed, and that the boy finding the material there, with that curiosity which boys often exhibit, had put his lamp to it, and caused an explosion, the natural effect of a fall being the evolution of more or less fire-damp. That also I look upon as being a case not "under ordinary circumstances," that is to say, that the imperfection of ventilation at that place was not "under ordinary circumstances." Then you may figure the case of a mischievous boy putting his foot through a piece of brattice, and you may figure many cases; in fact, you never can absolutely prevent falls from the roof of a road where there is an air course, and it frequently happens that such a fall may break down temporarily the brattice, thereby disturbing the ventilation. These were the elements which we presented to the Secretary of State in discussing these rules when they were being established, and which were given effect to in the rules ultimately adopted.

13588. Mr. *Liddell.*] I gather it to be your opinion that, for the purposes of justice, it is necessary that those words "under ordinary circumstances" should be retained?—I have no hesitation whatever in saying that.

13589. Are there any other words that suggest themselves to you which would more efficiently secure justice under extraordinary circumstances?—I am not able to suggest any. The words in the general rule were adopted as the result of mature deliberation, in which the late Mr. Nicholas Wood, a gentleman of great experience, took part, and that is the conclusion which we came to.

13590. Mr. *Vivian.*] There may be a sudden outburst of gas, may there not?—That is a thing which I omitted to notice, and that sometimes happens.

13591. So that the ordinary ventilation of the pit might be quite sufficient, and fully up to the proper quantity required under ordinary circumstances, but a sudden outburst of gas might occur which might render a largely increased amount of air necessary; might not that be so?—Of course I speak with deference on such a subject, not being a practical miner myself, but that is the result which I have arrived at from my intercourse with those who are familiar with such subjects.

13592. That would be something arising from natural causes which could not be foreseen by the manager or owner of the mine?—I take it so.

13593. Then, again, is it not necessary to diminish the ventilation after work, say on Saturday and during Sunday, in order to repair certain portions of the ventilating machinery, such as the furnace and the upcast shaft?—I could conceive that such a thing might occur often, though I am not prepared to speak to it as a matter of fact.

13594. Supposing that such were the case, during such suspension a large number of workmen not being in the mine, there would necessarily, I presume, not be the same ventilation as would be maintained under ordinary circumstances?—Quite so, and that question suggests to me a case that occurred in my own experience where, owing to some occurrence in the mine, there was a partial suspension of the ventilation from a Saturday till the Monday morning. In that case two men wished to go into the mine for the purpose of getting some articles belonging to them. They were warned that the mine was not then in its normal condition, but they insisted on going in, and they were injured.

13595. Then you consider that if those words, "under ordinary circumstances," or some words of that nature, were not in the Act, masters might be held responsible for accidents which might occur, over which they could have no possible control?—That is what we apprehend.

13596. Mr. *Liddell.*] Under such circumstances as those, is it not the duty of the fireman to ascertain, previous to any workman proceeding to his place, that the atmosphere is in a fit state for that man to breathe and to work in?—It is so.

13597. But would it not have been held, under the circumstances which you have just mentioned, that there was neglect in not sending the fireman to ascertain those facts before allowing those workmen to enter the mine?—Not so; because the condition of the duty of the fireman is, that the men shall not go to the place till they are allowed, so that if the fireman has not made an examination the men are in fault in going into the place at all.

13598. General *Dunne.*] Would not the words, "except under extraordinary circumstances," be better?—I think that would be the same thing.

13599. Who is to judge of the "ordinary circumstances"?—The Court before whom any question comes. In the case of Conor against Kidston, which I referred to just now, it was decided by a court and jury.

13600. You think, then, that it could not be defined better than it is?—I should be glad if I could suggest any better definition, but I am not able to do it.

13601. *Chairman.*] I did not quite understand whether these cases were before the Act of 1860, or since that Act?—All since.

13602. In the first case which you mentioned, the decision seems rather to have turned upon the general principle of law which exempts the master from any liability to his servant for an accident happening to him through his fellow-servant, than upon the construction of the words "under ordinary circumstances"?—It was not a case as to the application of that rule, excepting incidentally.

13603. It turned mainly, in fact, upon the general law which you described, and which I have just referred to, did it not?—Not altogether; it turned upon the general law, in so far as it was held that the man was a collaborateur in the sense of that general law, and that the master had done all that was incumbent upon him in having a well selected servant and a proper system; and it turned also upon the general rule, in so far as the parties endeavoured to found upon that general rule, and say, "here is an absolute obligation upon you which you cannot get rid of." We got rid of it by saying that it was not a case "under ordinary circumstances."

13604. The main principle, however, was the collaborateur principle?—No doubt.

13605. Do I rightly understand you to say that the law is, that the master shall not be exempt upon that principle unless he has taken proper care in selecting the workman through whose omission or default the accident happened?—I say so.

13606. Is that recognised in the decision?—That is recognised by the House of Lords in the decision

decision in the Bartonshill case, with this qualification, that if any party brings a suit against a master for damages arising from the fault of a fellow-workman, he must aver carelessness on the part of the master himself in making his selection.

13607. Mr. *Liddell.*] Then, if it could be shown that the person acting as manager, and holding the responsible position of manager, was an incompetent person, the master would be unable to find the shelter of the law in such a case as that?—Quite so.

13608. *Chairman.*] Do not you think that there are special reasons in the case of coal mines, which ought to exclude the operation of that law?—No, I do not think so. I can figure many cases in which a case for exclusion might be more strongly made; take the case of a ship's crew, for example. Now we have never heard it said that the relatives of sailors drowned by a shipwreck had a good claim for damages against the owner of a ship, if he sent out a well-fitted ship and well-chosen officers; and that is a much stronger case, I think, than the case of a mine.

13609. The original principle of the law is, is it not, that a workman by entering into joint service with another workman, puts some confidence in that fellow-servant or fellow-workman, because he knows him, and that if he chooses to remain in service, or to work together with a man whom he sees to be careless and incompetent, he suffers from his own misplaced confidence?—That is the principle.

13610. And that would not apply, I presume, to any very large employments, that is to say, to any employments where there were a great number of servants or workmen who had no opportunity of knowing each other, and who therefore could not put any special trust in each other?—I can scarcely conceive any work that I am acquainted with in which the workmen do not know the underground manager.

13611. But it is not merely the carelessness of the underground manager that may cause the accident, it is the carelessness of a fellow-workman, whom the workman who suffers has never seen, perhaps?—You are speaking now just of the ordinary workman, as I understand.

13612. Yes?—I have often thought that the principle was a little anomalous, because they have no opportunity of knowing who their fellow-workmen are, while it would be a very serious responsibility to attach to a mine owner, that he was responsible for the skill of every workman in his mine.

13613. Mr. *Vivian.*] I should like to know whether you can imagine any reason why an exception to the general law of the land should be made in the case of collieries?—No; I am not able to suggest any. Speaking of this question of law, notwithstanding the decision in the Bartonshill case, in the House of Lords, which applied to the misconduct or carelessness of an engineer, our courts have been very chary about carrying out the principle, and they have been in the habit of holding that if it could be shown that the official was in such a position as that he could be recognised as, properly speaking, the representative, or the substitute of the master, having a power over the men, in the way of employing and dismissing them, that the master was still liable; and they do it also occasionally, in virtue of these special rules that are objected to. We had a remarkable case lately, in which the master would have been entirely free from responsibility but for the terms of the special rules, he imposing thereby certain duties upon an official which were held to exclude the general rule of law.

13614. Mr. *Woods.*] Then that obeying of the orders of the overseer, and which is required by one of the special rules, seems to cut two ways in Scotland?—It does; that case to which I have just referred, was a case where a man apprehended danger from the falling of the roof. He pointed it out to the underground manager, who assured him that there was no danger, and ordered him to proceed with his work, and in that case the master was found liable in damages.

13615. Mr. *Liddell.*] Will you state to the Committee how enquiries in cases of accident are conducted in Scotland?—In consequence of the difficulties which some gentlemen of the Committee have about the absence of a coroner's inquest in Scotland, it may be well for me to explain that all these matters are in the hands of the public prosecutors, the Lord Advocate, his deputes, and the local procurators fiscal, and that enquiries arising out of accidents occur with us independently of there being death. Any charge against an official for neglect in connection with an accident in a mine, is brought up in that way. There is notice under the Act given to the inspector, and the Lord Advocate, who directs one of his deputes to cause legal instructions to be sent to the procurator fiscal of the locality to enquire into the circumstances. He either does that by himself, or he does it by some person in whom he has confidence. I have seen it suggested that he sends an inefficient clerk. That may occur sometimes, but it does not touch the principle.

13616. The responsibility of doing so would rest with the Lord Advocate, would it not?—If any complaint of that nature were made the Lord Advocate would set it right. There is a report made of the circumstances to the Lord Advocate or his deputes. If they consider that blame is attachable to the owner or to the officials, instructions are given to adopt the proper remedy, whatever it is. If it is a case of death or manslaughter, the party in fault is brought up and tried by a jury; if it is a minor accident, but still one caused by culpable carelessness, the party may be charged for a minor offence.

13617. The prosecution in all cases being conducted by the Lord Advocate?—By the Lord Advocate or those under his authority; under the Lord Advocate as the head of the establishment.

13618. He is responsible for such prosecution, in fact?—Quite so.

13619. Again, in reference to his delegating the enquiry to the hands of an incompetent person, if such person was proved to be incompetent, the Lord Advocate would be held responsible for having delegated the enquiry to him, would he not?—I cannot say that exactly, in the case of the Procurators Fiscal, because the Lord Advocate has not the appointment of the local Procurators Fiscal, they are appointed by the local courts. If it could be shown that such an official was incompetent, I have no doubt that the Lord Advocate has the power of having him suspended; and practically, we rather think that the Procurators Fiscal are more anxious to attend to these matters than is at all necessary.

13620. Is there anything peculiar in Scotland

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in the mode of selecting juries?—There are no juries in the mere investigation into an accident. Supposing that a case occurs of the death of a miner, the investigation is made in the way which I have described by the Procurator Fiscal, and reported to the Lord Advocate. It is only if the party is charged with a crime that he is tried before a jury, that is to say, only if a criminal prosecution takes place.

13621. And that is carried on in the ordinary courts of the country?—Yes.

13622. An action is not tried before a jury, is it?—It may be or it may not; the party may select his court; if he wishes to have it tried by a jury, he selects his court.

13623. *Chairman.*] I wish to ask you one question about the Procurator Fiscal, with reference to the point which we were discussing last time, as to the taking proceedings for the penalty; does the Procurator Fiscal exercise a discretion as to whether he will take proceedings when there has been a violation of the statute?—No doubt in the first instance.

13624. Therefore, he begins by exercising a judgment in the case himself, does not he?—No doubt.

13625. Therefore, if the Procurator Fiscal refuses to take proceedings for the penalty, the party who wishes to prosecute is without a remedy?—Not so; he may complain to the Lord Advocate, and failing the Lord Advocate, he may complain to the Secretary of State.

13626. He may complain, you mean, of the refusal of the Procurator Fiscal to take proceedings?—Yes.

13627. Mr. *Liddell.*] The Lord Advocate is a practising counsel, is he not?—He is.

13628. Might he not be engaged to defend civilly any case?—He might.

13629. What would occur, supposing him to be so engaged in a case in which he was actually prosecutor; could he perform a double function?—Nothing would occur, because he would decline the brief as being inconsistent with his public duties.

13630. His public duties would always in that case override his professional engagements, you mean?—They should do so.

13631. I will refer you to an answer of Mr. Moore's, given to Question 7818, with reference to an objection on the part of the parents to the employment of boys being prohibited by law; I believe you wish to make some statement with regard to that?—Yes; and there were some relative answers given by Mr. M'Donald in answer to Question 7868 and the following questions. In speaking to that matter, I of course speak at second hand, my information being gathered from the gentlemen with whom I am in constant communication. It is with regard to the limitation of what they call in Scotland the "darg," what you would call the "output," "darg" being an old Scotch word for a day's labour. The masters look upon that limitation as a thing originating entirely with the men, and having for its object the limitation of the stock of coal or ironstone, and thereby a power of controlling the masters and the market. If the men were working without such a limitation, a master might have a stock of coal, and if a question arose between him and his miners, he would say, "Very well, I do not care whether you work or not, I have a supply." But if the master is without a stock he is in a very different position, being, in fact, at the mercy of the men. Now the masters look upon this custom as one of the elements in the hands of the workmen by which they do so control the supply of the market, and not at all as a mere matter of ancient custom in which they, the masters, are participators; and the masters would be very glad to see such a limitation done away with, and every man putting out as much coal or ironstone as he could, according to his abilities.

13632. But I understand you to say that, as a matter of fact, the masters have, up to this time, recognised this limitation of the men, and have been incapable of dealing with it?—The masters have recognised it as a thing which they cannot help. Then the men themselves, by way of avoiding the very law which they themselves have made, in individual cases take down their boys at various ages, and then, as between themselves, they are permitted to increase their outputs. We do not put it at all that the colliers are not entitled to take any measures, fair and reasonable measures, that they can for the purpose of increasing their wages; but we look upon it as a very singular thing, that while they are the parties who originate the taking of the boys into the coal pits in the way that I describe, they should come to Parliament with a complaint that the boys come in at too early an age, and do not get sufficient education. The complaint being, that the boys go in too early and do not get education, we say, "You workmen are the parties who are responsible for that."

13633. You say that under peculiar circumstances the men get, as it were, special permission to transgress the rule of their own combination?—It is so; there is a general understanding on the subject; I am merely putting it now that the masters do not recognise it as a thing that they are at all wishing for, but the reverse.

13634. I am requested to put this question to you: do not the employers give all the advances of wages, and make the deductions upon the darg?—I presume so.

13635. *Chairman.*] That is to say, the masters recognise it, though they do not like it?—They recognise it because they wish as large an output as possible, and this mode to which I have just alluded is the mode by which the restriction is partially evaded.

13636. Mr. *Liddell.*] Are these restrictions upon the darg or outputs anything new, or have they always been in the power of the men to impose?—I cannot tell how long it is since they first began to impose the restriction, but they increase or diminish it occasionally to suit their purposes.

13637. And the probability, I suppose is, that the restriction has been greater, or rather, that the power of imposing the restriction has been greater since the whole system of combination has been more perfect?—No doubt it must have been so.

13638. Which is of comparatively recent date?—Yes.

13639. Will you furnish the Committee with the results of cases of accidents, judicially determined, in the last 10 years in Scotland, with a view of showing where the blame of those accidents chiefly lay?—Yes; during the 10 years referred to in the question, I have been secretary to the Associated Mine Owners, and in the habit of conducting the defences in the great majority

majority of cases coming into court, arising out of pit accidents, sometimes in the Supreme Court, where I require to act through the medium of counsel, but more frequently in the inferior courts, the Sheriff's Court, where I act as attorney and counsel combined; so that I have had an opportunity of seeing the results of these inquiries; now, during that period I find that we have had a total number of decided cases of 38; 15 of these being before the Supreme Court, and would, with perhaps one or two exceptions, be tried by jury, the excepted cases being where the judge sits, in terms of a special statute, without a jury; out of these 38 cases it was expressly found that the accidents arose out of the fault of the parties injured to the extent of 18; then another class is a class of cases where the action being founded upon the alleged fault, or neglect, or incompetency of the officials employed, that allegation was negatived by the judgment, and those cases amount to three.

13640. Do you mean that there were only three such allegations, and that in each case the allegation was found to be unfounded?—No, the allegation of incompetence occurred in the previous 18 cases as well; but I distinguish them from the three, because in the 18 cases the court expressly found that the fault lay with the parties injured, while, in the other three cases, the court merely negatived the alleged fault on the part of the officials, and thereby acquitted the masters. Then the next class consists of cases brought upon the allegation of fault, neglect, or incompetency in the same way, and after a record made up, and the parties being allowed a proof of their allegation, they either expressly and formally abandoned the case, or failed to bring any evidence in support of it; these cases amount to nine. Then there are cases in which the masters were found liable without the verdict or the judgment pointing out precisely the ground upon which it proceeded, but where it is presumable that the judgment rested upon the affirmative of fault or neglect on the part of the officials, though without any specific finding either as to their own fault or the fault of their employers; these amount to five.

13641. Mr. *Liddell.*] But those were cases where they became liable for penalties, I suppose?—No, not for penalties, but for damages.

13642. Mr. *Vivian.*] The masters were found liable in damages in five cases?—Yes, there is that case of Phillips against Roxburgh to which I have been referring, where the master was acquitted because he had done everything that was incumbent upon him, but the manager was found liable; that makes one other; then there remain two cases in which the masters were found liable, they themselves having been in charge of the operations.

13643. *Mr. Liddell.*] That is to say, they were cases where the masters were acting as managers?—Precisely.

13644. Then the result of that analysis is, that in only seven cases out of 38 were the masters found liable?—Yes, in seven cases out of the 38 the masters were found liable.

13645. Did any of these cases to which you have referred involve the masters in heavy damages?—Very serious damages; hundreds of pounds; I think that in a case against the Monkland Iron and Steel Company they had to pay some 700*l.* in damages.

13646. Of course that case had involved loss of life?—Yes; it had involved loss of life, but the damages vary according to the character of the injury. It may be an action at the instance of the widow or children of a party killed, or it may be at the instance of the party himself, who has been injured partially.

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13647. These damages were all obtained under the provisions of Lord Campbell's Act, I presume?—No; Lord Campbell's Act does not apply to Scotland, because it was not necessary in Scotland. At common law with us there is such a right as was created in England by Lord Campbell's Act.

13648. Then Lord Campbell's Act, as adopted in England, was, in fact, an embodiment of provisions of the Scotch law already existing?—Yes, so I understand. Our common law says, that any person connected with one who has been killed, and who can show that he or she had a natural claim to be supported by the party killed, has a claim for damages against the person in blame. That applies to the case of a widow, or a father, or a mother, or children, or grand-children, as the case may be. I was going to explain one thing, which I think it right and fair to explain; there has been, besides the cases which I have referred to, a recent trial before a jury in Edinburgh, in a case of Wilson against Sneddon, where two men were killed by the breaking of a rope used while they were descending a shaft in the course of sinking it. The question turned upon the neglect of the manager, and the jury found the plaintiffs entitled to damages. I have not included that case in my analysis, because that verdict has been set aside by the Court. A rule was applied for to show why it should not be set aside, as contrary to evidence; it has been set aside, and a new trial allowed.

13649. General *Dunne.*] You say that out of 38 cases, in seven cases the masters were found liable?—Yes, in seven cases the masters, and in one case the manager.

13650. Was that on account of the laws being so very stringent and favourable to the workmen, or do they require any alteration to give more power of recovering against masters?—No; we think that the law of Scotland is exceedingly broad in that respect, and that that law has been recently a little modified or corrected by the judgment in the House of Appeal to which I have referred.

13651. But was it on technicality and want of proof that the other cases failed, or on the actual law not extending to cases of that kind, that is to say, was it on a legal point or on facts?—There has no case turned upon the absence of power to give damages if the circumstances justified it.

13652. The facts being proved, the masters were not liable on that statement of facts?—Precisely; I only remember one case which turned upon non-liability in point of law, and I have not included that in my analysis at all; that was a case of a natural child claiming damages.

13653. Were these general applications or prosecutions for damages against the masters?—Precisely.

13654. Was it generally decided on the law that the masters were not liable, or on the facts of the case?—Generally on the facts of the case. In the 18 cases that I have cited, they were decided upon the express ground that the men themselves had been to blame.

13655. But in those cases, had the facts been proved; the liabilty of the masters was established by the present law, I understand you to say?—Perhaps

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Perhaps not; it might have turned out that the person in fault was a fellow-workman properly selected.

13656. Mr. *Powell.*] What is the composition of the juries engaged in the trials which you have referred to?—They are selected out of the general public.

13657. Are they selected according to the rules which govern the assembling of all other juries?—Quite so; according to the same rule by which juries in every case in Scotland are selected.

13658. From the same class of people, and by the same officials?—Yes; there is no specialty in the selection of a jury to try a case under the pit accident question to make it differ from any other case.

13659. Are such cases tried at the Assizes like any other case?—Yes, jury cases are. If they are brought before the local courts, the sheriff courts, then the sheriffs sit without a jury.

13660. And do those sheriffs assess damages?—Yes, without limit as to amount.

13661. Are the instances frequent in which the sheriff acts by himself in the case of colliery accidents?—Out of these 38 cases, 15 were tried in the Supreme Court, where they have a jury if they choose; the remainder of the cases were in the sheriff courts.

13662. Have you heard any complaint made amongst the colliers, of the conduct of the sheriff?—Not any; and I think I may say, without the fear of contradiction, that all the sympathies of the sheriffs, as local judges, are with the men, in cases of that kind.

13663. Does it often occur that sheriffs have any shares in coal mines, do you think?—I never knew an instance.

13664. *Chairman.*] Besides the cases that come before the courts, there are a good many cases which are settled out of the court, are there not?—Occasionally there are such cases.

13665. Very frequently, are there not?—No; I cannot say very frequently, but occasionally.

13666. Should you say that there were as many settled out of court as are decided in court?—No, I should not. I may say, however, that cases occur of this description; the master does not consider that he is under any legal obligation, but out of a feeling of sympathy for widows or orphans, he makes some payment.

13667. And you do not call those "cases settled out of court?"—No; because the cases I am alluding to are not cases of threatened action.

13668. But although the master may not admit his liability, it is possible that the court might have thought otherwise, if he had resisted the claim?—It is possible, and the analysis that I have given is quite open to an observation of that kind, with this counter observation, that many cases are threatened, and never brought into court, so that I have left out elements which are so fluctuating, and confined myself to judicial results.

13669. Many cases, or some cases at least, go to a certain point, and are then compromised out of court?—Cases of that kind do occur.

13670. And in many cases, without any legal proceedings being taken, the masters, as you have put it, out of consideration or out of sympathy, make allowances to the widow or the children?—I have known cases of that kind. On the other hand, I have known cases where actions were threatened, and where there was no liability, and the threatened actions were abandoned, and never brought into court; and there are as many cases of that kind as there are of the kind to which you have just alluded.

13671. These 38 cases by no means represent the whole number of accidents in the time?—No; but I think I may fairly make this remark, that that number represents the cases which were most favourable to the parties claiming, because they were the cases which came into court.

13672. But should not you say that the cases in which the masters paid, without allowing the matter to come into court, were still more favourable to the workmen?—No; I should not say so from my own experience.

13673. Mr. *Vivian.*] I presume that all these cases have been tried according to the ordinary law of Scotland?—Quite so.

13674. There is no law in Scotland specially applicable to collieries, is there?—None apart from the Inspection Acts.

13675. Do you see any reason why a law should be enacted specially applicable to collieries in this respect?—None. I do not see any reason why the general law of the country should be interfered with (as to liability I mean) with regard to colliers and miners.

13676. Mr *Liddell.*] You wish to explain, I believe, the law as to stores, and the probable cause of their prevalence in Scotland and not in England?—I was under the impression from what has been occurring in the Committee, that the Committee had some difficulty in understanding how it was that these stores existed in Scotland, while there were very few of them at least in England; and, from my experience, I am inclined to say that one reason may be the existence in Scotland of a law which we call the law of arrestment. I think it has been referred to incidentally in the course of this evidence; I shall state the nature of it briefly. It is the power on the part of the creditor, when he issues a writ against the debtor for any civil debt, to attach in the hands of third parties any moveable property or funds belonging to the debtor. When he does so, on issuing the writ, the subject attached remains in the hands of the third party until the issue of the cause; the creditor may also make a similar attachment by virtue of a judgment which he has already got. Then we have what we call a process of forthcoming before the court, in which the party holding the fund, or the subject, appears to state what it is, in order that it may be handed over to the creditor in liquidation of the debt. Some years ago this general law of arrestment was so far modified by the Legislature as to declare that a workman's wages should be held to be alimentary and not subject to arrestment, unless in so far as there might be a surplus beyond what was necessary for his maintenance, but still the law of arrestment as to the attaching of wages continues to that extent. Now while we look upon that as a very beneficial law, generally speaking, the prevailing opinion in Scotland is, that so far as regards workmen's wages, it is a pernicious law. It induces on the one hand the dealer to give credit to the workman, relying on this peculiar remedy, and thereby it induces the workman to deal upon credit. The masters are put to a very great deal of trouble in connection with these arrestments; they must necessarily keep an account of them, they must keep an accurate account of the monies and

and wages from time to time, and they must appear in the court when the question arises for making the arrested sum forthcoming; and so troublesome an annoyance is this with reference to the arrestment of workmen's wages, that it is quite a common thing to see an advertisement in the newspapers from a master, saying, "I pay such and such a workman daily," so as to avoid this trouble. Then, when a workman gets into debt with a dealer and arrestment follows, a very common thing is that he finds it necessary to leave his employment and be out of the way. I do not find that anything of the kind exists in England; and the impression, at least among many of us, is that the facilities for avoiding these disagreeable consequences, to both masters and men, afforded by the existence of stores kept in the neighbourhood of the large works, is one of the reasons why they continue to exist in Scotland, while they do not in England. If I may be allowed to refer to it, I find this brought out very distinctly by Mr. M'Donald, in the course of the evidence given by him before the Master and Servants Committee. It will show exactly what I refer to. In the course of his examination, in the answer to Question No. 530, and other questions, Mr. M'Donald explains, as I have now sought to explain, the nature of this law and its obnoxious character; and at Questions 596, 597, I find this evidence. The question is put by Mr. M'Lagan, "In the case of arrestment of wages, you would allow the master to follow the servant to any part of the kingdom to which he might go?" Answer: "Yes, he has that power now at common law." Then being asked, "Is not it the fact that the arrestment can often be evaded?" he says, "Yes, where there are truck-shops; the truck-shops serve to evade the law of arrestment, because if the men deal at the truck-shop, the master will not allow the arrestment to take effect against the workmen so dealing at his truck-shop." I merely add that, to call these stores "truck-shops," is a mere assumption in point of law.

13677. Mr. *Powell.*] It is stated in that evidence that the master prevents arrestment; how can he do so?—The masters prevent arrestment by opening a shop at which their men may have supplies without getting into debt with third parties, and exposing themselves to arrestment at the instance of these third parties.

13678. *Chairman.*] But any balance of wages that the master owed to the workman after the score that the workman owed to him was paid, might be attached, might it not?—To that extent.

13679. When you say, therefore, that the system of having these stores prevents arrestment, that is only partially the case?—It does not prevent it absolutely, but it has the effect; the practice being to give the men advances from time to time between the periods of payment; in that way their wages are to a considerable extent exhausted. I do not put it as an absolute proposition, but as the practical effect.

13680. Practically, there is so little left to attach, that the creditors give it up?—Yes.

13681. Mr. *Liddell.*] Do I rightly understand, that the peculiarity of the law of arrestment in Scotland tends in any way to relieve owners from any liability which may attach to them for infringement of the law regulating, or rather forbidding, the truck system?—Not at all.

13682. The laws already in force for the prevention of the truck system are equally binding upon owners in Scotland, as they are upon owners in England, you think?—No doubt. Having indicated that that state of matters in Scotland may be an explanation, to the Committee, of the existence of these stores in Scotland while they are not to be found in England, I may proceed to point out to the Committee, as I promised, the materials for forming some sort of judgment upon the state of the law in reference to what is called truck. What is generally known as the Truck Act, is the 1 & 2 Will. 4, c. 37, and that statute expressly declares that all contracts made between masters and men which shall stipulate that the men are to be paid otherwise than the current coin of the realm, are null and void. It declares, that if any contract has been made between a master and a servant, with a provision which, either directly or indirectly, evades the previous provision of the statute, that shall be null and void. And then it goes on with a variety of special provisions carrying out that general proposition, preventing masters from pleading against a complaint by the servant for his wages, that he is owing so much for supplies, and preventing a master instituting any suit against a servant for goods supplied from any shop in which he has a personal interest. That is the state of the Truck Act, and it appears to us to be exceedingly stringent in its provisions.

13683. *Chairman.*] You have not referred us to the penalties?—I will do so; the penalties will be found in Section 9: "That any employer of any artificer in any of the trades hereinafter enumerated, who shall, by himself or by the agency of any other person or persons, directly or indirectly, enter into any contract, or make any payment hereby declared illegal, shall for the first offence forfeit a sum not exceeding 10 *l.*," and so on, for successive offences. That being the state of the law, it is suggested, I understand, that it is evaded by means of arrangements between some of the mine owners and their servants; by means of an arrangement, for instance, that they shall be subject to dismissal or some other penalty if they do not spend their wages at these stores. Upon that point the practical witnesses will speak as to what is actually done; but I would say this much, that if a master intimates to a servant that unless he spends money at the store he will be dismissed, and the servant is thereby induced to spend his money at the store, that would be a contract indirectly in violation of the Truck Act, and the remedy would be perfectly open.

13684. Mr. *Liddell.*] Do you mean by that, that any contract of that kind made by any owner with his servant would render that owner liable for an infraction of the Act?—Yes; and not only so, but it would entitle the servant to go back for a year, or five years, or 10 years, and recover all the wages that had been improperly taken from him; I point out that as showing the position in which parties are. Now I find at Answer 7089 an enumeration of works at which it is said these so-called truck-shops or stores exist; I only speak, of course, at second-hand on the subject; but one of these is the Coltness Iron Company, and I have it from the proprietors of the Coltness Iron Company that they have no store in the sense represented; they have stores for the supply of the men which they let to a third party at a rent, but they have no interest whatever as to the way in which the money is spent. The Govan Iron Company is another instance

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instance mentioned in that answer; I have it from Mr. Dixson, the proprietor of the Govan Iron Works, that they have no store whatever. The Calder Iron Works is another instance referred to in that answer. I have it from the proprietor and the manager that they have a store, but some years ago they disused it, and that they were induced to commence the store again upon the pressing remonstrances of the men themselves. Then another of the individual instances mentioned is the case of Messrs. Merry and Cunningham; I hold in my hand (one of the managers will speak to the use they made of it) a printed hand bill, dated as far back as 1858, and I will read it as it is very short: "Notice.—The Glengarnock Iron Company have to intimate that in future, as in time past, no workman employed at their works, or at any of their collieries in connection therewith, is under obligation to spend any part of his wages at the store or warehouse for the supply of goods, established at the works, but may do with such wages whatever he pleases. The Glengarnock Iron Company, however, are equally free, and they intimate that advances of money to workmen between pays is entirely in the company's option; and advances, if made at all, will only be made at such times, in such sums, and to such workmen, as the company think fit, and only as a matter of favour. Wages will always be paid in full, under deduction of the accustomed off-takes, on the usual pay days; and, with the disposal in spending of such wages, neither the company nor any of their managers, or other servants in charge as having connection with the works, take any concern whatever." That applies to the Glengarnock works in Ayrshire, and I understand that a similar placard was issued with reference to all Messrs. Merry and Cunningham's works.

13685. *Chairman.*] Before we go further into facts, I should like to ask you whether you are aware that in some cases there are co-operative stores established by workmen?—I believe there are some instances of that sort.

13686. That would equally answer the purpose of obviating the inconveniences that arises from the law of attachment, would it not?—It would.

13687. But within your observation, you have not met with such a case?—I have not had occasion to observe it.

13688. Have you had to do professionally with many cases of alleged violation of the Truck Act?—Under the Truck Act there are certain excepted things referred to in that hand bill, as "off-takes," certain things which the master is expressly permitted to furnish, provided he has a written contract to that effect. I have had cases again and again where servants claimed their wages after they had been settled with, because of these off-takes having been retained from them; but I never have had a case in my experience of any workman complaining that his master had defrauded him in any way at the store; that is to say, I have not had any case of complaint by a workman under the arrangements for supplying men with goods at the store.

13689. Has this question ever been raised to your knowledge before the Scotch Courts; a workman alleges, we will suppose, and he is able to prove, that certain advantages are given to those who deal with certain stores, and that that is indirectly a violation of the Truck Act; has that point ever been raised?—No, I have never seen it raised.

13690. You are not bound to give an opinion as a lawyer upon the question; but, supposing that a workman could prove that certain advantages, in the way of making advances of wages, were given to those who dealt with certain stores, and that those stores were either directly kept by the master or kept by his lessees, do you think that he would have any ground for contending that that was a violation of the Truck Act?—It is always a delicate thing to give an opinion upon a question of that kind, and I should not like to do it, as I have seen questions of that kind running the course of all the Courts before they have been finally decided. I think, therefore, that it would be rather presumptuous for me to offer an opinion upon it.

13691. That particular question has not gone through all the courts, I suppose?—Not that particular question; there was one case where the allegation was that the man had not been paid in coin, that man being an *employé* of the Shotts Iron Company, and the action, I think, was of this nature; it was brought for payment of the wages back for a number of years, the allegation being that this Act had been violated by non-payment in coin. It went through the inferior Courts, and ultimately came to the Supreme Court, and the Court held that he had not made out his case; but that decision, as I understand, was not founded upon an indirect influence such as you suggest having been used, but upon the express allegation of non-payment in coin.

13692. The evidence of that allegation was, was it not, that instead of being paid in coin, he had been paid in the goods which had been supplied to him at the stores, and charged for those goods?—I do not know the particular circumstances.

13693. Mr. *Liddell.*] Was that judgment given upon a question of law, or upon the facts?—It would be upon the facts, I have no doubt.

13694. Because it might have been shown, for instance, that the allegation was not a proper allegation?—It might; but it was a question of facts.

13695. Would it be lengthy to describe to the Committee the materials or articles which are the subject of off-takes, or deductions?—Not at all, but quite simple. These excepted articles, which the master may furnish to the men, are to be found in Sections 8, 23, and 24 of the statute. Section 8 refers to notes of the Bank of England, and under Section 23 there are excepted medicine, medical attendance, fuel, tools, or implements.

13696. "Materials," I suppose, mean things used by a man in his work, props, and so forth?—I apprehend so; then there are materials, tools, or implements, hay or corn for any horse kept by the man, the rent of any premises demised or left, as you call it, to the workman, and dressed victuals, are excepted; then it is declared that these may be stopped, provided there is a written contract to that effect; and the questions that arise under that are generally as to whether the contract has or has not been a written contract; Section 24 excepts monies advanced to friendly societies or savings banks, or spent for relief in sickness, or education.

13697. *Chairman.*] By "materials" you would understand raw materials for a man to work upon, would you not?—I would understand that.

13698. Should you conceive that the word "materials"

"materials" extended to the timber that is used for props in a mine?—I think that that would be included under the word; supposing the arrangement were, as I believe it is in some collieries in England, that the workmen should pay for the timber, then I would look upon it that that would be authorized under the word "materials."

13699. But the word "materials" would rather apply to the materials that the workman has to make up, would it not?—It might cover a variety of things; there might be an artificer who was to produce a given thing at a given price, and it might be a bargain that he was to pay so much for the materials to be be supplied for the purpose of making it.

13700. The prop that a man uses in a mine is rather in the nature of a tool than a material, is it not?—I would think it was rather a material; but you may call it a tool.

13701. Do you think, in fact, that there may be a doubt as to whether the word "materials" covers that point?—Either the one word or the other would cover it, I think.

13702. It might fall to the ground between the two, might it not?—I think one or the other would cover it.

13703. General *Dunne*.] From some of your answers I gather that you approve of the truck system to a certain extent?—I do not think I said so. I may say, however, that I am convinced of this, from my experience, that there are many cases of distance from ordinary supplies, and otherwise, where it must be a great convenience to men to have access to a store, and I am also convinced, from my experience, that it must, if fairly carried out, be a protection to the men, in many instances, from the oppressive and obnoxious operation of the arrestment law.

13704. Are you aware whether, in this truck system, the masters ever sell at cost price, or do they make the same profits as any ordinary stores?—I understand they make the same profits, and nothing more.

13705. But they do not give the articles to the men as they do in canteens in the army, at the cost price?—No; I understand not, but practical witnesses here will speak of that. I do not profess to know about it.

13706. Do not you think that the system opens the door to a great deal of fraud?—No, I do not think that.

13707. Are the men forced to deal with those truck-shops in any of the collieries in Scotland?—It has been said in evidence before this Committee, that they are so forced to deal, by threats of dismissal or otherwise. I cannot tell whether that is so.

13708. That is to say, you have merely heard that as part of the evidence?—Precisely.

13709. You know nothing about Messrs. Merry and Cunningham's works in regard to this point?—I know nothing except that Mr. Merry, and everybody connected with his establishment, says that it is not true.

13710. Altogether, would you think that legislative interference ought to be carried further than it is on that subject?—My opinion is, that the Truck Act, to which we have been referring, is an ample protection against any improper procedure on the part of the master keeping stores.

13711. Do you think that the present truck system causes any discontent among the men?—I gather it from the evidence before this Committee, but I was not aware of it before.

13712. Do you think that that evidence represents the feelings of all the men in Scotland?—I cannot tell.

13713. I thought you had a good deal of experience in these complaints?—I have conversed with the men, and I have conversed with the managers, but I have never spoken with anyone who said that it was an evil.

13714. Is the law on that point the same in Scotland as it is in England?—Yes.

13715. Because it was given in evidence, I think, that it was more stringent in England?—No, the Truck Act is a British Act.

13716. Have you ever heard of there having been any strikes on account of these truck-shops?—I never heard of a strike at all connected with such a subject; there may have been strikes that I know nothing of.

13717. *Chairman*.] What are the usual intervals between the pay days in Scotland?—They extend from a week up to a month—weekly, fortnightly, and monthly.

13718. The inconveniences that arise from the attachment law, would apply very much less in the system of weekly wages, would they not?—Just to the extent of the diminuition of the fund.

13719. Therefore, the masters have it in their power to avoid those inconveniences by having weekly pays, have they not?—An arrestment on the Saturday, if the pay were weekly, would just be the same thing as at the end of a month.

13720. The mortgage of a month's pay is a very much more serious thing than the mortgage of a week's pay, and the evils, whatever they are, of the attachment system, would exist in much greater force, would they not, in the case of the monthly pay than in the case of the weekly pay?—Just in proportion to the amount of the wages.

13721. Mr. *Liddell*.] I believe you wish to make some remarks on the subject of sub-inspectors?—I want to give the Committee, if they will permit me, the result of my knowledge of the views of the masters regarding sub-inspectors and the system of pupils. What the masters say is this, that under Section 8 of the existing Mines Inspection Act, the fullest power is given to the Secretary of State, to appoint any number of "fit persons" to be inspectors; and that, as far as the mine owners in Scotland are concerned (and I apprehend I may say the same thing for the mine owners in England), no objections whatever exist to any increase in the number of inspectors. But what they desiderate is, that these shall not be an inferior class of men, as regards experience, status, and character, to the present inspectors, and that they shall be directly responsible to Government. That view excludes not only a body of sub-inspectors properly so called, but also the pupil inspectors referred to by Mr. Woodhouse. Such a proposal as that of having pupil inspectors, I am warranted in saying, will meet with the most strenuous opposition.

13722. I believe you have some statistics in regard to education?—Yes; I have heard a good deal said about the matter of education, and I see that Mr. M'Donald in his evidence does not complain of the want of schools; but I thought it might be interesting to the Committee to have before them certain returns which we obtained from the masters of Lanarkshire, Ayrshire, and Renfrewshire, and which were described in this document (*handing in the same to the Committee*) at the time when the Mines Inspection Act was in Committee. That document contains the results

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sults of returns made in answer to special queries issued by me on behalf of the Mine Owners' Association at the time of the Mines Inspection Act passing.

13723. *Chairman.*] It is not brought down to the present time apparently?—No; it is not brought down to the present time.

13724. Is it published in the Appendix to the Report of the Committee on that Act?—It was a Committee of the House; it was not a Select Committee; it was while the Bill was before the Committee of the House that that document was prepared.

13725. You only furnished this information for the House, as I understand you?—Yes.

13726. Mr. *Liddell.*] Does not that appear in some shape or other before Parliament at present?—No.

13727. *Chairman.*] It was circulated amongst the members while the Bill was in committee?—Yes; precisely.

13728. And you wish to put it in now, do you?—I thought it might be an element for the Committee to have before them.

13729. Is the same system continued?—The same system, generally speaking, is continued.

13730. Are you in a condition to say that taking the average of the 13 schools mentioned in this document, they are in the same state of efficiency, both as to funds and as to numbers of attendants, that they were in at the time of making that statement?—In a general way, I think I am warranted in saying so.

13731. General *Dunne.*] Could it be continued to a later date, do you think?—I have no doubt it could.

13732. *Chairman.*] Would it be too much trouble to bring it down to the present day?—Not at all; I shall be very glad indeed to do so.

13733. If you can give us the state of things as it was then, and also bring the statement down to the present time, the Committee will be much obliged to you?—I will do that.

13734. Mr. *Powell.*] Are the school buildings in good repair?—I am not able to speak particularly about more than one or two.

Mr. John Watson Ormiston, called in; and Examined.

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13735. Mr. *Liddell.*] You are Manager for the Shotts Iron Company, I believe?—I am.

13736. They have coal and ironstone works in Lanarkshire, in West Lothian, and in Mid Lothian, and they employ a very large number of persons, about 2,000, do they not?—Yes.

13737. Have you been for 7½ years manager for the Shotts Iron Company?—I have.

13738. And you were formerly Messrs. Merry and Cunningham's manager at their works in Ayrshire for a period of nearly 14 years, were you not?—Yes; I was one of Messrs. Merry and Cunningham's managers at their iron works in Ayrshire for that period.

13739. Speaking of the district in which you are now, and of the company which you are at present connected with, are there any truck-shops in that district?—There are no truck-shops; but the company have four stores in connection with their works. We do not admit that they are truck-shops at all.

13740. Are they stores which are managed directly by the company themselves, or by their agents?—They are stores belonging to the company, and managed directly by themselves or by their agents.

13741. Will you tell the Committee why the company established those stores?—For the convenience and accommodation of their workmen, and also for profit to themselves.

13742. How far are your works situated from any town or shop?—The works of the Shotts Iron Company, when originally established, would be, I think, about six or seven miles distant from any village.

13743. Originally these stores, then, were set up in consequence of the great distance from the works to any town or village?—Quite so.

13744. If they are done away with, would it be an inconvenience to the workmen?—I think so. If these shops were done away with, I should think that, in regard to a considerable class of the workmen, we would have to resort to a system of daily pays, which is generally acknowledged to have a very injurious effect upon the workmen themselves.

13745. Then are we to understand from that answer that there is a system of credit given in these shops, which the workmen might or might not receive in an ordinary shop?—No, unless to the very best classes of workmen. The ordinary class of workmen, or the more improvident, have to pay ready money in these stores for all that they purchase in them.

13746. Ready money payments are absolutely required in these stores, of which you are now speaking?—Quite so.

13747. There is no system of credit allowed?—No, unless to the very best classes of workmen.

13748. If it were shown that a regular system of credit was encouraged at these stores, might not that be construed as an infraction of the provisions of the Truck Act?—I do not know whether it could or could not.

13749. Then why do you insist upon ready money payments?—Because we would not trust that class of workmen; and, moreover, from the provisions of the Truck Act, we could not sue them, civilly, for a debt.

13750. *Chairman.*] You said, I think, that when the works were established they were at a distance of six or seven miles from the nearest store?—The Shotts works, I think, would be about that distance from any shop.

13751. Since the works have been established, some open stores have been set up, I suppose?—Yes, a village has grown up round about the works since they have been established.

13752. Within what distance?—Within half a mile, or so.

13753. And in that village there are open stores?—Yes.

13754. So that the same necessity for stores being kept by the company does not exist now as existed when the concern began?—Certainly not, in that respect.

13755. Are there many open stores in this village of which you speak?—Yes, a great many.

13756. Do many of Messrs. Merry and Cunningham's workmen deal at those open stores?—I am not in Messrs. Merry and Cunningham's service

service now; it is of the stores of the Shotts Iron Company that I am speaking.

13757. Do the men of the company which you are connected with deal at those stores which exist in the village?—I have no doubt that those shops or stores are supported almost exclusively by the Shotts Iron Company's workmen, because there is very little custom in the district except that which the Shotts Iron Company's workmen supply.

13758. You said that it was the practice of the company only to give credit to the very best classes of workmen?—Quite so.

13759. What did you mean by the "very best classes;" did you mean those in the receipt of the highest pay, or those whom they know as well-conducted individuals?—Well-conducted, steady, honest, industrious workmen.

13760. Credit is given only to those whom you know and could trust, you mean?—Certainly.

13761. Mr. *Woods.*] The most respectable men?—Yes.

13762. *Chairman.*] It is a matter of preference and privilege, then, to be admitted to have credit with these stores?—Yes.

13763. You say that if these stores were done away with, it would be necessary to have daily pays?—For a certain class of the workmen.

13764. Why?—Because they are very improvident, and they would not get credit in the shops in the neighbourhood.

13765. You say that one reason why you cannot give credit to these men of the lower description, or the more improvident description of workmen, is that the company could not sue them for what was owing?—Just so.

13766. Why could they not sue them?—Under the provisions of the Truck Act.

13767. You mean, then, to admit that the selling in this way is a violation of the Truck Act?—By no means.

13768. Why could they not sue them for goods supplied at these stores, if it was not such a violation of the Truck Act?—There is one of the provisions of the Truck Act which specially states that the employers shall not have the privilege of suing for goods supplied by them to their workmen, even supposing that they purchase them just in the ordinary way of purchasing them in shops.

13769. Then you admit that supplying the workmen in that way is a violation of the Truck Act, do you not?—No, I do not admit it, because the workman may pay, if he so chooses; it leaves it optional with him to pay or not, but you cannot sue him for the debt.

13770. You mean that although it comes under the Truck Act to this extent, that the workman is not liable to be sued, yet it is not such an infraction of the Act as would subject the owner of the mine to the penalty; that is what you mean, I presume?—Yes.

13771. Have you any means of knowing whether the owners of the colliery make any profit by these stores?—Yes, they do make a profit from them.

13772. Have you any means of knowing what sort of profit they make?—Yes, I have.

13773. Is it the ordinary trading profit, or is it more, or is it less?—Just the ordinary trading profit.

13774. What do you call the ordinary trading profit?—I would call the ordinary trading profits the same profits as would be derived by any shopkeeper selling the same class of goods; in many cases we sell goods under the prices that ordinary shopkeepers sell them at.

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13775. Mr. *Liddell.*] An ordinary shopkeeper must make such an amount of profit as shall cover, at any rate, the rent of his premises?—Yes.

13776. The premises in which these stores are held belong to the owners of the colliery, do they not?—Generally, they do.

13777. Consequently, from that circumstance, they ought to be enabled to sell goods at a lower rate than a shopkeeper could, ought they not?—No, I think not; because they had to erect these premises originally themselves, and they would require a return, of course, upon their capital.

13778. They would take element into account?—Yes, they would expect a fair interest upon the capital.

13779. *Chairman.*] You say that they sell at about the same rate as other shopkeepers?—Generally they do, and in some cases I have known them selling under.

13780. Did you ever hear of a co-operative store being set up in the village of Stane, near to Shotts?—Yes.

13781. Did that co-operative store succeed?—It is going on at the present day; I believe it has succeeded very well.

13782. Was it in any way discouraged by the owners of these works?—Not in the slightest; on the contrary, I recollect recommending the workmen, at the time it was established, instead of getting up a small affair, as they proposed to do, to club together their savings, and I would recommend the directors of the Shotts Iron Company to make over to them the large store near to the Shotts Iron Works.

13783. Did you make that communication to them with the authority of the directors?—Not with the authority of the directors; I simply promised to recommend to the directors to do so, and I have no doubt whatever in my own mind that, if the men had set vigorously to work, as I recommended, and had seemed to appreciate the offer, the directors would have done so.

13784. Had you any reason to believe that the directors would have accepted your recommendation?—Perfectly so; from what I knew of the directors, and from what I knew of the small profit that they were deriving from the store business, I had every reason to believe that, if they had thought it was going to be any object to the workmen, or that the workmen would have appreciated it, they would have been quite prepared to have handed that store over to them.

13785. This store, which you offered to put at their disposal, for the purposes of making it a co-operative store, would have been in opposition to the store that was put up at Stane, would it not?—The store I am speaking of was not established yet at Stane; I merely recommended them, in place of beginning on such a small scale as they proposed to do, to take in the whole of the workmen round the works, and get it established on a respectable scale.

13786. That was before the co-operative was begun?—Yes; they proposed to begin in a very very small way.

13787. They did not accept your proposal, as I gather from you?—No, they did not.

13788. Did the workmen express any desire, then, to be free from the necessity of dealing with the company's stores?—No.

13789. What other object could they have had in

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in establishing a store of their own?—I think it was from reading so much about these co-operative stores in England, and the advantages to be derived from them. For my part, I do not think that there is any advantage to be derived by the workmen from these small co-operative stores; but if it occupies their time, and teaches them habits of business, and takes them from the public-house, and such places, I think it is a good thing.

13790. How often are the pay-days at these works?—Monthly.

13791. Have the workmen ever applied for more frequent pay-days?—Lately I had a deputation from a few of the workmen, asking payments fortnightly.

13792. Was that acceded to?—No.

13793. On what ground was it not acceded to?—It would have led to a great deal of inconvenience in the first instance, and my own opinion is, that with fortnightly pays we should simply have had the loss of work doubled, which we had with monthly pays.

13794. But all the inconveniences that we hear of as resulting from the law of attachment in Scotland, are greater than the case of monthly pays, I presume, than in the case of weekly pays?—I do not think so, because with more frequent pays you would just have the shopkeeper using his power of arrestment oftener, and you would be saddling the workman with greater expenses, for there are certain expenses involved every time that the arrestment takes place, and you would have that in operation four times instead of once.

13795. You did not mention the inconveniences of the law of arrestment as one of the reasons which induced the owners of these works to set up stores of their own?—No, I did not mention that; but every employer of labour in Scotland knows, and I believe has felt too, the inconveniences of the law of arrestment.

13796. Do you agree with what Mr. Burns has said, namely, that that is one of the reasons why the owners of collieries and other works should have stores of their own?—I have no doubt of it; I should coincide with Mr. Burns' opinion in that respect.

13797. Mr. *Liddell.*] You give your men advances of money daily, or even hourly, if they require it, do you not?—We do.

13798. And must not the men spend such advances of money in the stores?—Not necessarily.

13799. In making the advances, do you not stipulate that those advances should be spent at the stores?—No; we made no stipulation whatever. I have got the rule (a private and special rule) to be observed by all the managers, foremen, and workmen in the Shotts Iron Company's service, which applies to that point, and I can read it to the Committee: "The pay or settlement day shall be on the second Saturday of every calendar month; that is, for the month immediately preceding, so as to give time for making up the books and statement of each individual workman's account, or company of workmen's accounts, for work done or time employed during the preceding month. This arrangement shall continue in all time coming, unless altered by new regulations, of which due notice shall be given. Notwithstanding the pay or settlement day being once a month, the Shotts Iron Company make it a fundamental rule of agreement with them and their workmen, that they shall have full power and liberty to pay any or all of their workmen any portion, or the whole of the daily earnings, as subsistence money, should they, their manager, or foreman in charge of the department, see and are satisfied that such a payment shall be for the benefit of the workmen themselves. As these daily or less frequent payments are attended with trouble and expense to the company, the option of making more frequent payments than once a month, is hereby declared to rest exclusively with the company themselves, and not with the workmen. Workmen not giving satisfaction, or not conducting themselves in a proper way, will not be admitted to these benefits."

13800. *Chairman.*] The notice that was read to us by Mr. Burns had reference to Mr. Merry's works, I think?—Yes.

13801. This is very much the same notice as that, but a little fuller?—Something of the same kind, and that rule is hung up in all the works belonging to the Shotts Iron Company, and every one knows it.

13802. Mr. *Liddell.*] Is that (*handing it to the Witness*) a form of account used at the stores?—I dare say it is, but I do not know; there is no date upon it at all.

13803. Will you take that book in your hand (*handing it to the Witness*). You will see a note in pencil attached to the lowest entry of money paid. Can you explain that; it is signed with two initials?—No, I do not know anything about that at all.

13804. *Chairman.*] With reference to that rule which you have read, are you able to say that in the exercise of the option by the company of making advances, no preference is shown to the workmen who deal with these stores?—We do give a decided preference in making these advances to the workmen who deal with the stores.

13805. You admit, do you, that a decided preference is given in making these advances to the workmen who deal at the stores?—I have no hesitation whatever in admitting that.

13806. Mr. *Liddell.*] But supposing a man said that he was in the habit of dealing with a shop somewhere else, would he be refused the advance, that is to say, supposing a workman objected to deal with your store because he was in the habit of dealing with some one else, would you then object to making him any advance?—Perhaps the best answer I could possibly give to that question would be a general statement, which I hold in my hand, showing what we actually do.

13807. I want a specific answer to my question?—I never had such a case come before me, in my experience as a manager.

13808. Do you mean to say that there are none of your workmen who deal with other shops besides your stores?—I have no doubt there are many who do so, and perhaps, if you will allow me to give the substance of this statement, you will see that for yourself.

13809. Your answer is, that you have never had such a case?—I have never had such a case in all my experience.

13810. What is the general statement to which you wish to refer?—This is a general statement of the total amount of wages paid by the Shotts Iron Company at those places where they have stores. There the average of the last five years' annual payment of wages to the workmen is 74,606 *l.* The total value of goods of every description sold in the company's stores during that period

period is 109,576 *l.*, and the average, therefore, for each year is 21,916 *l.* Now, in that 21,000 *l.* odd of goods sold there, is between 3,000 *l.* and 4,000 *l.* worth sold to the general public residing in the neighbourhood of the works, and not connected with the company's works at all.

13811. Showing that the use of the store is not confined to the workmen?—Quite so; and it shows also the sort of proportion of the workmen's wages that are spent in the company's stores. Then perhaps I may also be allowed to state the amount of cash that is advanced between the pays to the workmen. The average of the five years is 32,640 *l.* Now, you have the total amount of goods sold 21,000 *l.* odd, and from that you have to deduct between 3,000 *l.* and 4,000 *l.* for goods sold to the general public, which leaves the proportion of goods purchased by the workmen at about 18,000 *l.*

13812. *Chairman.*] From that you would wish us to infer, I suppose, that the advances are not entirely for the purpose of being spent in the stores?—Certainly.

13813. Mr. *Liddell.*] But at the same time I must say that it is not satisfactory to my mind to hear that it is a condition of advances that any goods purchased out of those advances shall be purchased at your store, and I want to understand why you make that condition?—I beg your pardon; we make no condition whatever with the workmen in regard to these advances.

13814. *Chairman.*] You admitted a general preference for those workmen who spent their advances at the stores; but not a special obligation upon them to spend any advance of half-a-crown or five shillings, or whatever it might be, at the store?—Certainly not any obligation of that kind.

13815. Mr. *Liddell.*] But I undoubtedly understood you to tell me a short time ago that in the event of a man asking for advances he would get them; but he would have to spend the money at the store?—I did not mean to convey that. If I apprehended the nature of your question correctly, I think you wanted some additional information, and I admitted quite readily that we advanced more freely to parties dealing at the stores than to others. As to our reasons for so doing—our reasons are these: without some sort of check of that description we would very soon degenerate into a system of daily pays. Then again, in nine cases out of ten, these parties who get advances, and do not spend a considerable portion of them in the purchase of goods in the company's stores, make use of them to go and establish a system of credit with the shops in the neighbourhood until they can get in with them upon credit, and then we are bothered with arrestments coming upon them.

13816. *Chairman.*] In what way would the absence of this check lead to a system of daily pay?—In this way; if these improvident classes of workmen could get money whenever they chose to ask it, we would have them asking it every night.

13817. We are not speaking now of giving advances to workmen whenever they ask it, but we are speaking of the reason for giving a preference to those who deal with your stores?—That is all the preference that we give them in that respect, and we think we are quite entitled to do so if we choose.

13818. I admit that it would be very troublesome if you gave to any workmen without a reason his day's pay whenever he asked for it; but you have not shown to my understanding any reason for a difference between those who lay out their money at your stores, and those who lay it out anywhere else?—Those who are in the habit of dealing regularly with shops in the neighbourhood, do not ask any advances from us during the month, at all; they get their money paid to them at the month's end, and they have a running account at some shop, and do not deal at our stores at all.

13819. What I do not understand, is in what way ready money encourages people to deal upon credit; I should have thought that if they had money in their hand, it would encourage them to go to these open stores and pay for what they want?—I am speaking of the class who take advances during the monthly pays; and they are generally the most improvident class of workmen we have.

13820. Am I right in supposing that this is your meaning, that if an improvident workman could always get 5 *s.* when he wanted it advanced to him, he would have a greater facility for establishing the credit system with the shops in the neighbourhood, because he would pay a small bill two or three times, and then get credit?—Undoubtedly; that is precisely what I mean.

13821. And then he would be constantly coming to you for his 5 *s.*?—Yes, and he would run backwards and forwards between the shopkeeper and the company's stores for the purchasing of goods, and we would have arrestments coming in upon him at the pays.

13822. Those who deal with the company's stores more frequently come to you for advances, as I understand you?—Yes, we advance upon the average 32,640 *l.* a year between the pays.

13823. Deducting from the average amount sold at your stores, what is sold to the general purchaser; the result, as I understand you, is 18,000 *l.*, which is about one quarter of the men's wages?—Yes.

13824. On what articles is that money spent?—On provisions and groceries, principally.

13825. Is it very nearly as much as the whole expenses of the workmen would be in those articles?—I should think not.

13826. You do not sell meat, do you?—We do.

13827. You sell, besides meat, groceries and cheese, I suppose?—Yes, all things necessary for a workman's family.

13828. All things in the way of provisions, and candles, and so on?—Yes.

13829. The whole expenditure out of the 74,000 *l.* paid in wages, upon the articles you supply, would be very much more than 18,000 *l.*, you think?—I think undoubtedly so; and the very existence of such a number of shops in the neighbourhood, which are nearly all supported by the workmen employed by the Shotts Iron Company, proves, I think, that they spend a large amount of their earnings in those shops.

13830. Is it the practice for the men who deal with your stores, when they have received an advance, immediately to hand over the money to the keeper of the store, and then to enter into dealings with him till they have run out that money?—I believe some of them do so.

13831. As soon as they have received the money from the pay office they pay over the whole of their money to the keeper of the store?—Yes.

13832. And in that way they get credit with him

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him to the amount of money they pay?—Quite so.

13833. Mr. *Woods.*] Do you sell ale and spiritous liquors?—Only in one case, and in that one case it is not to be consumed upon the premises.

13834. Mr. *Liddell.*] Under a system of this kind, it seems to me that the workman is really very much at the mercy of the storekeeper; he pays over, say, to the storekeeper, a certain amount of money, and he draws out in goods to the full extent of that sum; but supposing that he complains of the quantity of the goods furnished, has he the same facility for remedying the quality complained of that he would have if he went with the money in his pocket, and absolutely refused to pay for anything the quality of which he disapproved?—Perhaps not; but I can say this from my own experience, that during the seven and a-half years that I have been manager for the Shotts Iron Company, I have given the workmen every encouragement to come to me if they had any ground whatever of complaint in regard to either quality or price of goods supplied in the company's stores; and during the whole of that time I have only had two complaints, and I can give the Committee particulars of those two cases if they wish to have them. In both those cases, the complaints were totally without foundation.

13835. *Chairman.*] When a workman receives an advance from the pay clerk, he hands in a book, does he not, or it is entered in a book?—Yes, that is between the pay clerk and the workmen, in order that there may be no mistake as to the balance.

13836. When he requires a further advance, he produces the book again?—Quite so.

13837. And if the whole money that he had received, or if a considerable proportion of the money that he has received, has not been laid out in the store, the storekeeper makes a mark in the book, which prevents him from receiving any more; is that so?—I do not know exactly the details of the system by which it is done, but I told the Committee, in answer to one question put to me before, that I had no hesitation whatever in saying that we gave advances much more freely to those parties who were in the habit of dealing at the stores than to others.

13838. In other words, there is a pressure put upon the workmen to make them deal at your stores?—No, I can hardly say that that is a pressure.

13839. They are denied, in fact, advantages and conveniences, if they do not deal at your stores, which they have afforded to them if they do?—We give them greater advantages and facilities if they deal at these stores, and that we think we are quite entitled to do.

13840. Mr. *Powell.*] During how long a time (I do not wish anything very accurate, but speaking in a very vague and rough manner) may these works be expected to be continued; 10 years, or 25 years, or 100 years?—The Shotts Iron Works have been in existence since the beginning of the present century, and there is no particular reason why they should not see the end of another.

13841. To whom does the land in the neighbourhood of the works belong?—Part of it belongs to the Shotts Iron Company, and there are a number of small proprietors quite in the immediate neighbourhood.

13842. Is there much difficulty in acquiring possession of a piece of land in that neighbourhood?—I should think not, because there are half-a-dozen different proprietors, within a mile of the Shotts Works.

13843. Are there many of the work people who have acquired money by industry and saving?—A great many.

13844. Are there many persons of fairly competent means in the neighbourhood?—Belonging to the working classes, do you mean.

13845. Not to the working class necessarily; but are there many persons well-to-do in what you would call the middle class, or the lower middle class of society in the neighbourhood?—No, it is rather a country district in the neighbourhood of the Shotts works. There has been no public work for many years in the neighbourhood of the works, except what belonged to the Shotts Company. Some small works have sprung up recently.

13846. Seeing that it is the case that land is easily to be acquired in the neighbourhood, and seeing that it is the case also that some of the workpeople have accumulated savings, how do you account for it that nobody has bought land and built stores in the neighbourhood?—But there are a great number of stores or shops in the immediate neighbourhood of the works; I should think as many as 20.

13847. Then, if the company were to suspend their stores no great public inconvenience would arise from such suspension of their stores, I presume?—I should think that a considerable amount of loss and inconvenience would accrue even to the workmen themselves; because I know, as a matter of fact, that since I came to the place the bread which has been supplied at the company's stores has been sold at a penny the four-pound loaf cheaper than it could be got elsewhere.

13848. You consider that the profit of the company arising from the stores is the ordinary profit of the keeper of stores?—Never more, and sometimes less.

13849. Then it comes to this, does it not, that owing to the large transactions of the company, they are able to buy cheaper than other shopkeepers?—Quite so.

13850. And consequently, in fact, they are underbidding other shopkeepers?—They are buying large quantities, and of course they can buy at the cheapest possible rate.

13851. And sell at a cheap rate?—They can.

13852. And consequently, in practice, they undersell the ordinary shopkeepers in the neighbourhood, do they not?—They do in certain cases.

13853. And that circumstance will, I presume, to a certain degree, deter others from building stores in competition with those of the company?—Yes.

13854. And I suppose the loss from bad debts to the company at their stores will be less than to ordinary shopkeepers?—Yes, the company have certainly a better means of guarding themselves against bad debts than other shopkeepers.

13855. You stated that if you were to give the men their money more frequently, and let them deal where they liked, they would get into credit, and you would be bothered with arrestments; in other words, why should you create an artificial system of this kind, in order to avert the inconvenience of arrestment?—I do not think that

we

we create an artificial system. We gather together all of a sudden a large population.

13856. Whom do you mean by "we"?—Iron and coal companies.

13857. I am now speaking of your company particularly?—When the Shotts Iron Works were first planted in the district where they are now, they were in a very outlandish district, and of course it was a convenience to the workmen to be supplied at the company's stores.

13858. I will not take the state of things a hundred years ago, when the country was rude and uncultivated; but speaking of the present time, why should you create an artificial system of this nature at the present day?—I do not think we create an artificial system at all.

13859. But surely the system of having these large stores, and the system which you describe of advances being made on certain conditions, is a highly artificial condition, acting in restraint to a great extent of the workman's freedom?—You have just to take the workmen as you find them, and you find a large proportion of them very improvident. As you put the question, I understand it to amount to this, why the masters should have stores at all. If you put it in that way, then I think it just comes to be a question whether it is better for these improvident classes of workmen to be dependent, in a manner, upon the masters, or for them to be dependent upon the small shopkeepers. In the one case they would get into debt with these small shopkeepers and be tied to them by the system of arrestment coming in upon them; while, in the other case, they are only dependent upon the masters.

13860. Do you think that their dependence upon the masters is a healthy and sound condition, and one calculated to draw forth the energies of the workmen?—Certainly not, and I am glad to say that it is gradually disappearing year by year, and I hope to see the end of it.

13861. Then the Committee are not to take you as an advocate of the system which you describe?—Certainly not; I only wish to expose the misrepresentations of it.

13862. Mr. *Clive.*] Do you allow any competition; do you allow butchers and bakers to call at the men's houses, for instance?—Butchers can call, and bakers too.

13863. Do you ever make any objection to their calling, or to any other persons calling with goods to sell?—I never did.

13864. Have you ever heard of any objection being made?—No, I never heard of it.

13865. I suppose you do really make a profit out of these stores?—No doubt of it.

13866. And that is the real reason why you keep the stores, is it not?—Not altogether; certainly it is one of the reasons.

13867. Mr. *Woods.*] I believe you said that the amount of business done at the stores was about 21,000 *l.* per annum?—Yes.

13868. In addition to 3,000 *l.* or 4,000 *l.* per annum purchased by the general public?—Less that amount. The total amount of the business done at the stores is 21,000 *l.* per annum, and we deduct that amount of 3,000 *l.* or 4,000 *l.* as the amounts paid by the public for purchases at the stores.

13869. Can you state the amount of wages paid at the Shotts Iron Works per annum?—The total amount of the wages paid annually by the Shotts Iron Company at those places where they have stores is 74,606 *l.*

13870. And you make a profit by that, you say?—Yes.

13871. Can you tell the Committee the estimated profit made?—£. 1,500 to 2,000 *l.* a-year; it is very rarely that we have had it 2,000 *l.*; not knowing that this question would be asked I cannot give the exact figures.

13872. Mr. *Kinnaird.*] You said that it was not obligatory upon the workmen, in one sense, to deal with these truck shops; but is it not practically very much like it?—It is something like it in one sense; but if a workman chooses to deal honourably with a shopkeeper in the neighbourhood, and pay his pass book at the end of every month, he will get credit quite regularly.

13873. But as it works, the great majority of the workmen are under the system of which we have been speaking, are they not?—No, I do not think the great majority of them are.

13874. Mr. *Woods.*] I believe that a fair deduction, from what you have said to me is, that a fourth part of the wages are dealt with at the store, that is to say, it is about 17,000 *l.*, or 18,000 *l.* to 74,000 *l.*?—Yes, about a fourth.

13875. Mr. *Kinnaird.*] With regard to the three boys, Shelley, you heard, perhaps, what a previous witness stated to the Committee?—I did not hear what the witness said about the three boys, but I read his evidence.

13876. What have you to say as to that; is the account not perfectly correct?—No, certainly it is not; it is about as gross an exaggeration as ever I have read.

13877. Perhaps you will state the case then?—Yes. The statement as I understand was, that that man Shelley had three boys, and that himself and these three boys remained in one of the company's pits for three days consecutively. That was so extraordinary a statement that when I read it first, I was at the pains to go to every one of the Shotts Iron Company's underground managers (and they have six of them), men of very considerable experience as underground managers, having filled the position for 30, 26, 20, 19, 18, and 15 years, respectively, and I put the question to each one of them, separately, if they had ever known or heard of either man or boy remaining in the pit for even 24 hours consecutively, and not one of them ever heard of such a thing. After a considerable amount of enquiry I got the man's own statement, which is simply this, that he and his boys were working in one of the Shotts Iron Company's pits, and at the end of his shift he thought he was about to go through upon another place, which would give him a considerable quantity of what is technically called "cut coal." He sent his boys home at the end of the first shift to send him out some "tommy," as he called it, and he would remain in the pit, he said. They did so; they went home, and sent him his "tommy," and he remained all night in the pit. They came down the next morning, and wrought along with him the next day, and they all went home together that night. And his story is corroborated by the oversman at the pit, who also adds, that one good man would have done as much work in one shift as Shelley and his three boys did during the whole time.

13878. I see a statement in the evidence before us, which I think you will corroborate, that George Simpson, senior, George Simpson, junior, and John Story, were all called up to the office?—Yes.

13879. And all made the same statement as a previous

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previous witness, in reference to what you have been telling us about Shelley, did they not?—Certainly not; I can give you the questions that I put to each one of them, and their answers; I called each one of them in separately, in order to get their own story from them in their own words, and, as I have said, I can give the questions and the answers that I got from them, if it is desired; there was another statement made before this Committee, that the Government inspector of mines, Mr. Moore, had, during one of his visits to the Shotts Iron Company's pit, ordered one of these boys, Shelly, out of the pit; now in answer to that, I have simply to say that neither Mr. Moore nor any Government inspector ever sent either man or boy out of any pit under my charge.

13880. Mr. *Woods.*] The profit of 1,500 *l.* or 2,000 *l.* a-year, which you have stated as resulting from the stores, would be about 7½ to 7 per cent. upon the amount of business done, would it not?—Quite so; it generally runs about 7½ per cent., and that includes the profit on spirits as well.

13881. Mr. *Powell.*] Have you any statistics respecting schools in your neighbourhood?—I have.

13882. Can you put them in?—They are not yet in a shape in which I can put them in.

13883. Will you put them into such a shape?—Yes.

13884. Are those schools in the hands of the masters, or are they in connection with different religious denominations and apart from the masters?—There are four schools in the neighbourhood of the Shotts Iron Works, and the workmen have the privilege of sending their children to whichever of the schools they like; each workman pays 2½ *d.* per week, and for that they have the privilege of sending all their children above four years of age to the school.

13885. At what age do they pay; does a boy begin to pay as soon as he goes into the pit?—A boy pays when he goes down the pit, and he has the privilege of going to the evening school.

13886. Do the schools receive a grant from Government?—No.

13887. And they are not under Government inspection, I presume?—There are two of the schools that are under Government inspection.

13888. Do they belong to the company?—No; there is one of the schools which is called a Free Church school; another is what is called an endowed school, it goes by the name of Wilson's school. In reference to the other two I may say that one of them is in connection with the works, and was built by the company; and the other was partly built by Government assistance, and partly by private subscription.

13889. To whom does the fourth school belong; does it belong to the Established Church, or to the Free Church, or to some other religious body?—I think it belongs to the Established Church, and Wilson's school is also in connection with the Established Church.

13890. Do you know the amount that the company contribute to the schools?—They do no contribute money directly, but they give the teachers, I think in all the schools, free fire coal.

13891. Is there any contribution given by the Shotts Company beyond this contribution of coal to certain teachers?—No; there are certain contributions given by the directors annually for prizes to the children; those prizes and these coals to the teachers I think are the whole amount given.

13892. The school is self-supporting, except for these small subscriptions, and the contributions of coal?—Quite so.

13893. Do you think there is any possibility that the balance is in favour of the company; in fact, that the company derive a profit from the school?—Certainly not, because the school fund is under the management of a committee composed of the workmen themselves; they lay on the assessment themselves, and that has been at 2½ *d.* per week, since the commencement of the system, and they publish a statement yearly to the workmen.

13894. Does that account of which you speak apply to all the four schools that you have named?—It does.

13895. Have the workpeople management of the fees of the school in any way?—They have no direct management of the school, but they have the making of the arrangement with the teacher as to the sum which he shall charge per head for teaching; and they have certain indirect means of influencing the teachers.

13896. In fact, they have the control of the price charged weekly?—Quite so, and that committee could refuse to allow the school-fees to be retained in the office, and hence they have a great indirect power over the teacher.

13897. If there were any profit derived from the schools, it would be in the power of the workmen, as I understand you, to diminish that profit by requiring the price charged per head to be reduced?—Certainly, because they make up their own statements every year, and submit it to the workmen.

13898. Have you any Roman Catholics amongst those who are employed at your works?—Yes.

13899. How is the education of their children provided for?—Just in the same way as the education of the others.

13900. Do their children go with a willing mind to the same school as the Protestant children?—I never heard any complaint.

13901. Mr. *Woods.*] What is the proportionate part of all the wages paid at your works which is expended at the stores, about a fourth, is it not?—Yes.

13902. What is the proportionate part of the whole business done at the stores by persons who are not employed by your company?—I think I stated that, as between 3,000 *l.* and 4,000 *l.* a-year.

13903. Out of 21,000 *l.*; that is to say, about a sixth?—Yes.

Thursday, 12th July 1866.

MEMBERS PRESENT:

Mr. W. Orme Foster.	Mr. Liddell.
Mr. Greenall.	Mr. Neate.
Mr. Kinnaird.	

CHARLES NEATE, Esq., IN THE CHAIR.

Mr. JOHN WATSON ORMISTON, again called in; and further Examined.

Mr. *J. W. Ormiston.*

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13904. *Chairman.*] I BELIEVE you have some statement to hand in to the Committee?—I wish to hand in a statement with reference to education, and a tabular statement with reference to the stores. (*The same were handed in.*—Vide *Appendix.*) I have also an explanation to make in regard to my answer to Question No. 13900.

13905. The question is "Do their children" (that is to say the children of Roman Catholics) "go with a willing mind to the same school as the Protestant children"? and your answer is "I never heard any complaint"?—Quite so; I understood the question to apply to any complaint of the Roman Catholic workmen themselves, but I have to mention that the Roman Catholic priest of the neighbourhood did apply to me for a piece of ground on which to erect a school, which request was declined.

13906. Did the Roman Catholic priest on other occasions express his dislike to the system that was going on?—Yes. I think he did on two or three occasions; the Roman Catholic priest, not the workmen.

13907. Is there any other point on which you wish to refer to your former evidence?—I think not.

13908. Mr. *Kinnaird.*] You say that you never had any complaint from any workmen of the Roman Catholic persuasion, about their children being brought up in your schools?—Never.

13909. But you had from the priest, as I understand you?—I had an application from the priest for ground, on which to build a school exclusively for the use of the Roman Catholic children.

13910. Did he complain about the children being educated in your school?—I cannot recollect the exact cause of his wish as stated by himself to have a separate school, but I understood generally that it was his wish to have the Roman Catholic children entirely separated from the Protestant children in their education.

13911. You did not grant his request, you say?—I did not.

13912. Because you thought in your own mind that there was not the slightest occasion for it?—I have never had any complaint from the Roman Catholic workmen themselves, and I did not think that the priest was a proper representative of the workmen.

13913. There was not the slightest interference with their individual views in the school, I suppose?—Not the slightest that I am aware of.

13914. If there had been such interference it would have been stopped by you?—Quite so.

13915. And you think there was no reason for any complaint whatever?—I think not; and, besides that, I had a particular reason for not wishing to see any other denominational schools start up in the district, we had three separate denominational schools already, and the intelligent workmen who were managing the educational scheme for the district had several times represented to me that they thought it would be an excellent thing if the whole schools could be combined into one, instead of being separated into four, as they are at present, and asked if I could not devise any scheme by which it could be done.

13916. There would be great economy in such a proceeding, would there not?—Certainly, and a much higher standard of education could be got for the children at the same price. I explained to the workmen when they made those representations to me, that the school belonging to the works was an old one, and that the directors of the company contemplated shortly applying for Government aid to erect a large school for the works, and possibly that, by and by, as denominational prejudices subsided, that school might be so far extended as to contain them all; but to have granted the request of the Roman Catholic priest for a piece of ground on which to erect a Roman Catholic school exclusively would have been just the very way to perpetuate the denominational system, and to make it more difficult to get a Government grant for the other school which we contemplated erecting.

13917. In your experience, there is not the slightest difficulty in conducting schools on the union basis?—I do not think there is any, so far at least as the workmen themselves are concerned.

13918. Mr. *Liddell.*] You said that it was the wish of the very intelligent body of workmen who had the conduct of the education to combine all the denominational schools into one; what was their view as to the mode in which the religious instruction should be carried on, or was the education to be purely secular?—I did not discuss that matter with them; but among the intelligent workmen in Scotland a very strong prejudice exists against clerical interference of any kind in the education given in the schools.

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13919. I am aware that the religious feeling in Scotland is extremely strong, and I want to know, in the event of throwing three or four denominations (we will say the Church of Scotland, two or three sects of Dissenters, and a number of Roman Catholic children) into one school, what is the view of the workmen in Scotland generally as to the mode in which religious instruction should be conveyed to those children?—In Scotland, in connexion with every school, there is a Sabbath school for the religious instruction of the children.

13920. That is held on the Sunday only?—That is held on the Sunday; and I think that the opinion of the intelligent workmen in reference to the ordinary religious instruction, that is, or ought to be, given in the schools, is simply that a teacher belonging to any denomination may give such general instruction on religious subjects to the children as will not interfere with the particular tenets of any.

13921. But I should like to know how that can practically be done; I understand you to say that the workmen wish that the minister of any denomination of children attending a particular school should have the power of giving religious instruction during the week, and I want to know how you carry that plan out?—We do not carry that plan out at all; we do not allow the minister of any denomination to interfere in giving religious instruction to the children in the schools during the week days at all.

13922. Is it the master, then, that is charged with giving religious instruction?—Entirely so.

13923. How does he give that religious instruction; does he read the Bible and expound the Bible?—Yes.

13924. What does the Roman Catholic priest say to that?—I had a case something of that kind when I was manager for Messrs. Merry & Cunningham, at their Ardeer Iron Works, in Ayrshire. They were at great expense in erecting an excellent school for those works, and they had a considerable number of Roman Catholics in their employment. There was a Roman Catholic school in a village called Saltcoats, about a mile, I think, distant from the works; and just at the time when the school I have spoken of was about to be opened, I was informed by some of the foremen of the departments that their Roman Catholic workmen had told them that the priest had denounced from the altar any workman who should send his children to that school. I thought this very extraordinary conduct on the part of the priest, and as I knew him personally, I took the first opportunity of speaking to him upon the subject, and told him what I had heard. He said that what he had said to the people had been greatly misrepresented to me; that of course he would wish the Roman Catholic children to attend their school at Saltcoats, and to be brought up under a Roman Catholic teacher; but that rather than see the Roman Catholic children growing up in ignorance, he would desire that they should attend the school provided for them at the works. I had previously told him that the employers, Messrs. Merry & Cunningham, having been at such great expense in erecting a school for the benefit of their workmen, certainly would not allow any of their workmen to bring up their children in ignorance while the means of education were so liberally provided, and that if I found in practice that the Roman Catholic children were not sent either to the Roman Catholic school at Saltcoats, or to Messrs. Merry & Cunningham's school at their works, I would dismiss the fathers of these children at once from their employment.

13925. Then Messrs. Merry & Cunningham waived their particular desire that the children should attend their school at the works, in deference to the feelings of the priest, as I understand you?—Yes.

13926. But they attached the condition, that if they did not attend their school, they must attend the Roman Catholic school?—Yes; I may also explain, that in the interview which I had with the Roman Catholic priest on that subject, I stated that we had made arrangements with the teacher of the school, that if the Roman Catholic parents objected to their children attending at the opening prayer which we have in all the Scotch schools, they should be admitted separately half-an-hour later; that the Roman Catholic children would not be expected to learn any of the catechisms taught in our Scotch schools, and that if their parents objected to their being taught the ordinary Bible lesson, the teacher would specially exclude them; that is to say, they would keep their seats when that class was called up. More than that, I said we would not do. I thought that quite fair, and he admitted it.

13927. But Messrs. Merry & Cunningham still insisted, and properly insisted, upon the teaching of the Bible lesson in their school, as a part of the elementary instruction of the day?—Yes.

13928. Mr. *Kinnaird.*] What was the practical result; did the men cease to send their children to Messrs. Merry & Cunningham's school?—The practical result was just this: that in a very short time most of the workmen withdrew their children from the Roman Catholic school, and sent them to Messrs. Merry & Cunningham's school; and a short time after, when I made inquiry of the teacher, how he was getting on with the Roman Catholic children, he told me that he had had a call from some of the parents of the Roman Catholic children, asking what was the reason why he did not allow their children to join in the Bible lesson along with the others, and he told the parents that he had no objection whatever, but, on the contrary, would be very glad, as he had excluded them from that lesson only out of deference to what he considered their prejudices. The parents of these children told him that they wanted their children to join in the Bible lesson along with the rest of the scholars.

13929. And it ended in their attending the Bible lesson?—It ended in that being the practice, so long as I was manager at the works. It is seven years and a-half since I left those works, but I believe you will have another of Messrs. Merry & Cunningham's managers to show how the system is still working.

13930. Mr. *Liddell.*] Then I understand, that for seven years and a-half, this school has been really and truly a mixed school, as far as the denominations go; that no objection has been offered by the parents of the children to the Bible lesson, which forms part of the school instruction of the day, and that the whole works harmoniously and satisfactorily?—The school to which I have been referring is one belonging to Messrs. Merry & Cunningham, at one of their iron works in Ayrshire. It is seven years and a-half since I left those works, and I cannot speak

as to how the school has been going on since, but I believe the Committee will have the manager who succeeded me at those works of Messrs. Merry & Cunningham to speak to that point.

13931. Mr. *Greenall.*] You have spoken in your former evidence of your own school; in your own school you have had no objection raised by the parents of the Roman Catholic children, as I understand you, because in your previous evidence you said that no difficulty had arisen with the Roman Catholic children?—Yes, I was referring then to the schools at Shotts. I never had any complaint, as I said before, from the Roman Catholic workmen themselves.

13932. Not any complaint from that time down to the present moment?—No.

13933. And are Roman Catholic children now receiving education in that school?—I believe so.

13934. Without a complaint?—Without a complaint from the workmen themselves.

13935. Mr. *Liddell.*] And in very considerable numbers, I suppose?—I could not speak as to the numbers; I think that in the course of the correspondence which I had with the Roman Catholic priest on that subject, he admitted that there were about 75 per cent. of the Roman Catholic children attending the schools in that neighbourhood, because his complaint was that there were about 25 per cent. of the children not attending any school. In my reply, I stated that I thought that was a pretty large percentage of those children that were attending the schools.

13936. Mr. *Greenall.*] Is there any school in existence now which is frequented by Roman Catholic children, and of which no complaint is made by their parents?—I believe that all these four schools that I have spoken of in the neighbourhood of Shotts works, are, more or less, frequented by Roman Catholic children, and I have never had a single complaint from the parents about them.

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13937. You had a complaint in respect to one school, from the Roman Catholic priest, as I understand you?—No, not in respect to one school; the application was from the priest for a feu, as it is called in Scotland, or a piece of ground on which to build a Roman Catholic school.

13938. He wished to build such a school, I suppose, because he objected to the children going to existing schools?—Quite so.

13939. How near is the Roman Catholic chapel, at present, to the colliery?—The place where the Roman Catholics worship at present at Shotts, is at one of these schools belonging to the works.

13940. Then the proprietors permit them the use of that school?—Quite so.

13941. *Chairman.*] Where do these Roman Catholics come from?—Mostly from Ireland.

13942. Has there been an increase in the number of Irish workmen employed in the mines of late years?—I would say not at Shotts.

13943. Mr. *Greenall.*] What would be the proportion of Irish scholars, speaking generally, attending the school?—I could not say at present.

13944. Mr. *Liddell.*] I presume that none of these Roman Catholic children attend the Sunday schools carried on under the Established Church of Scotland or the Free Church?—Certainly not.

13945. They are at perfect liberty to attend their own Sunday school instruction, and as a fact they do so?—I believe they do.

13946. *Chairman.*] Is there anything else that you wish to state to the Committee?—There is nothing else.

Mr. JAMES BAIRD, called in; and Examined.

13947. *Chairman.*] YOU are the General Manager over several of Messrs. Merry & Cunningham's works, are you not?—I am.

13948. How long have you been so?—I have been general manager at some of their works for about 7½ years, and I was assistant manager for about six years previous to that.

13949. What is the extent of those works?—There are a great many branches of them; they employ in all about 5,000 colliers and miners, and about 1,800 or so, of furnace-men, and men about the pit banks.

13950. That is to say, 5,000 men in the pit, and about 1,800 on the pit banks?—Yes, on the pit banks and furnaces, at the iron works.

13951. These are not merely coal works, but there are iron works in connection with them?—Yes; that is the number of men in connection with the whole.

13952. What is the proportion of those in the collieries to those in the iron works; how many men are there employed in the iron works?—I could hardly state the exact proportion; not half of them are colliers; considerably more than half of them are miners.

13953. These iron works are ironstone mines, I suppose?—Yes; the miners are in the ironstone mines, but the men that I spoke of as working at the iron works, and that I included in the 1,800, are above ground.

13954. Do you bring ironstone from other districts to work at those works?—Yes; we have works in Ayrshire, Lanarkshire, Renfrewshire, and Dumbartonshire.

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13955. And you work up the ironstone brought from other parts?—Yes.

13956. You wish to give evidence about the weighing system, I believe?—We have weights at all our pit banks. Some of the ironstone miners are paid by the actual weight, but all the colliers, and the remaining ironstone miners are paid merely by the hutch, containing a certain weight.

13957. That is to say, supposed to contain a certain weight?—Yes; at two of the collieries where the question has been raised, we have offered to put the men on weighing, but the men would not have it; we have no objection to it.

13958. Mr. *Liddell.*] It is partly then a system of payment by measure, and partly a system of payment by weight?—Yes.

13959. *Chairman.*] In two collieries you say you offered to pay them by the absolute weight, and the men refused?—Yes, they prefer to go on on the present system.

13960. In what way did you ascertain the opinions of the men?—By a deputation of the men coming to the managers to talk over the matter; the men retired to consider whether they would have it on the conditions offered, and they brought back a refusal.

13961. The proposal to have weighing originated with Messrs. Merry & Cunningham, as I gather from you?—Not at all; it originated with the men, and we agreed to it, but they refused to have

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have it. It entails a great deal more trouble and expense to weigh the hutches.

13962. Then you accepted the weighing, as I understand you; but I suppose upon certain terms not contemplated by the workmen?—We said that if they were paid by the actual weight, it must be by the actual weight of the clean hutch. We strive to get the hutches as clean as possible.

13963. You were manager upon that occasion, I suppose, and can tell us what it was that the workmen asked in the first instance?—They wished to be paid by the weight in the hutch; our managers told them that they were agreeable to pay them by weight, but that the hutch must be clean. In some cases where they hole in a daugh or stone, they put out a considerable quantity of that mixed amongst the coals, and of course we strive to get as few of those hutches as possible, and if we were paying by weight we would riddle the hutches and deduct the refuse.

13964. I understand you to say that you are very willing to pay by the weight if it is clean coal?—Yes, perfectly so.

13965. Before this proposal, what were your regulations as to dirty coal; did you forfeit hutches containing dirty coal?—We forfeited a hutch sometimes on account of the dirt.

13966. Had you any rule as to the amount of dirt that was necessary to forfeit a hutch?—In different districts there were different rules according to the coal.

13967. In your colliery what was the rule?—We have five separate collieries under my charge. There are some of them where the coal is absolutely clean, because we riddle below; at others we do not riddle the coal below, and in those cases we make more liberal allowance for dirt than we do in the cases where it is riddled below.

13968. Then you had not any definite rule for the amount of dirt that would justify you in forfeiting a hutch?—I could not state any particular amount.

13969. In consequence of that the workmen wished you to change to a system of weight?—They did at that time.

13970. And you accepted that; did you require that all the coals should be weighed, or did you make any allowance for dirt?—We would make a deduction for every hutch put out according as we riddled and found dirt.

13971. How did you propose to ascertain the deduction you would make?—By cleaning an occasional hutch.

13972. And taking that as a sample?—Yes. There are some men more troublesome than others in that respect; some give no trouble at all as to cleaning, and others will persist in doing so.

13973. When you say, "clearing an occasional hutch," you mean an occasional hutch of the same workman?—Exactly so.

13974. You had a separate mode of dealing with each colliery, as I understand you?—At one colliery, where we are very much troubled with stones, we constantly keep a man riddling on the pit head, selecting a particular hutch now and again, and we find that it pays us to do so, that is to say, when we discontinue this man, we have an increase of dirt in the coal, and, moreover, we almost constantly keep a man riddling a waggon of coals after they come into the furnaces; we know what quantity of dross and dirt the different pits are putting out by this means, and put a man on the pit head also, so that they may riddle it there to find out the defaulters.

13975. You did not state any particular amount of dirt which would justify you in forfeiting a hutch, I think?—I could scarcely make any general statement as to that, because the different coals are so varied.

13976. At any rate the proposals which you made were not satisfactory to the workmen?—Apparently not.

13977. And they preferred, under the circumstances, going on with the old system?—Yes.

13978. What is your opinion generally as to the relative merits of weighing and measuring?—The weighing entails a great deal more trouble and expense to the proprietors, but if it was to be of any advantage whatever to the workmen, then they would give way to it. It almost entails having an extra man upon the pit bank, and it involves a great deal more labour to the clerks in the office.

13979. Which do you think is the fairest mode?—Payment by weight is certainly the fairest mode, if the weight is correctly ascertained.

13980. Is there a general feeling among the workmen in favour of weighing?—I have not heard it expressed at all, except upon those two occasions to which I have referred.

13981. They did not accept the terms upon which weighing was conceded in those instances?—No.

13982. The system of measuring affords greater opportunity to the workmen of defrauding the employer, does it not?—It does.

13983. Therefore the system of weighing is fairer both for the employer and the workmen?—The system of measure is fairer where there is a great deal of dross, because the dross is of comparatively little value, and with the system of payment by weight, they could put a larger portion of that dross into the hutch than was at all necessary.

13984. Why should they put more dross if paid by weight than if paid by measure?—Because the dross does not make up for measure, but it would make up for weight. Supposing you filled a hutch with round coal, you might put in dross, and that would make it weigh heavier, though it would not make it bulkier.

13985. Because the dross lies closer?—Yes.

13986. And, therefore, if the men are paid by measure, they have no inducement to throw in dross, but if they are paid by weight, they throw in dross because it increases the weight?—Yes.

13987. Therefore you say that where there is a great deal of dross, or small coal, the measuring system is the fairest?—I think so.

13988. Mr. *Liddell.*] You expressed yourselves as perfectly willing to adopt the weighing system provided the men would agree to your terms?—Yes.

13989. But did you purpose to furnish them below with the means of riddling the coal?—In several of our collieries just now they do riddle the coal; in one of those collieries, where the objection was raised, we wished them to riddle the coal below, and they would not.

13990. I suppose that there is some little practical difficulty in separating the dross from the coal in some cases, is there not?—Not at all; there is no difficulty whatever.

13991. Can the separation be effected without riddling the coal?—No, not without riddling the coal.

13992. Then

13992. Then each hewer would have to be provided with the riddling apparatus?—Yes.

13993. Would you furnish him with it, or would he be required to find his own? — He would be required to find his own.

13994. Had that anything to do with the men refusing to adopt the weighing system?—Perhaps it might, but I could not say.

13995. I have been requested to ask you whether you know the works at Den?—Yes, Barkip is the proper name.

13996. Do you remember the case of a man being warned off the pit bank there for attempting to act as a justice man for the men?—Yes; it is an ironstone mine.

13997. He was a man appointed by the miners to act on their behalf?—Yes.

13998. Will you explain the circumstances of that case?—He was put off for general insolence to the manager, and for stopping the working of the pit; I may mention that there were eight pits there, and all the pits put on justice men; in two of them the justice men were objected to by the manager on account of the manner in which they interfered with the working of the pit; the other six discontinued the practice of their own accord.

13999. I presume that you have no objection to the men appointing a justice man provided that justice man behaves himself?—None at all.

14000. Do you know the works at another colliery, called Inkerman?—I do; they are not under my charge, but I know them.

14001. Did you ever hear of a justice man being warned off the pit bank there? — I do not remember hearing of that.

14002. We may assume, that if the managers see an evident inclination on the part of a justice man to make himself disagreeable, and to interfere, they dismiss him; but if he is a quiet man, and merely stays there to peform the duty assigned him by the workmen they make no objection to him?—No objection.

14003. Would you go so far as to say that you would prefer to have a justice man on the pit bank?—We found that we did get better weight when we had a justice man on the pit bank.

14004. It tended to keep the men in order, as well as the masters, in fact?—Yes; and several of the contractors (not ours, but the Messrs. Bairds'), said that they preferred to have justice men kept on.

14005. What is the character of the man who is usually appointed as justice man?—I believe it is generally those who are readiest in agitating amongst the men, who are made justice men.

14006. Is he a man disabled physically from active work generally?—No, I do not think so.

14007. Mr. *Greenall.*] I collect, that your opinion is, that if wages were paid by weight, a good justice man would be as great a protection to the employer of labour as to the workmen?—Yes, if he was quite straightforward in his conduct, and gave justice alike to the master and to the men; but we find that their justice is all one-sided justice, and that they do not care at all for the masters. Moreover, in the cases of several pits where justice men have been put on, several of the workmen have refused to pay for the justice men, they have at times tried to cause those men to be put out of the pits, because they would not contribute to their support. I have been told, on the other hand, that the justice man has repeatedly told the pit weigher to take as much over weight as he could from those who were not contributing to his support.

14008. It is as important on the part of the master as it is on the part of the workmen, that a good officer should be employed; a good and respectable servant?—Quite so.

14009. Mr. *Liddell.*] Were these two pit banks to which I just now referred, ironstone mines?—They were.

14010. And consequently they were not under the statute at all?—No, they were not.

14011. Therefore, there was no legal obligation on the part of the master to allow justice men?—No; we could have put the whole eight off, if we had chosen, but we only chose to object to those two.

14012. *Chairman.*] Are you sure that these cases were not within the Act?—Perfectly sure.

14013. Were they not ironstone mines in the coal measures?—There was no coal in connection with those mines.

14014. Do you know anything of a strike at the Den Works about weighing?—The men there are very troublesome, and they have now and again petty grievances to complain about, but I do not remember any continued strike about weighing.

14015. That is one of their alleged grounds of complaint, is it not?—We have no complaint from them just now at all.

14016. But you have had in past time?—Yes, certainly; it was there that they put the justice men on.

14017. It was in consequence of the remonstrances of the workmen that you allowed them to put a justice man on?—Yes.

14018. Mr. *Greenall.*] What is your explanation of the 29th clause of the Act of 1860, with respect to the weighing of ironstone?—We actually do pay by the weight. I mentioned, I think, that each hutch was to contain a certain weight, but that we pay by the hutch, instead of paying by the absolute weight.

14019. But I understand Mr. Liddell to put a question to you with regard to two mines in particular, and you said that there was no obligation on you as to weighing, which that clause seems to indicate there is?—There is no obligation at those mines. Those mines are almost the only ones where we pay by weight, and yet they are not within the statute at all. The men asked for this system, and we have conceded it to them.

14020. You are clear in your opinion that you are not obliged so to weigh?—Perfectly clear as to that.

14021. *Chairman.*] You wish, I believe, to put in a statement explaining the cost, the income, and the expenditure of the schools in connection with Messrs. Merry & Cunningham's collieries and ironworks?—I do. (*The Witness handed in the same.*—Vide *Appendix.*) I have seen it stated by a previous witness that Messrs. Merry & Cunningham realise a considerable profit from those schools, and I have to state that that, as the Committee will see by the paper which I have handed in, is quite untrue, and in fact they contribute a sum of about 450 *l.* yearly to the schools under them.

14022. In the way of deficiencies, you mean?—In the way of deficiencies, that is, taking into account the interest at 5 per cent. upon outlaid money.

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14023. Will you look at the account, and tell me what is the amount in that account paid by the workmen for school fees?—There are 10 schools enumerated here. In those 10 schools the workmen pay 592 *l.* 2 *s.* 2 *d.* for fees. When I say "workmen," I should say that there are two schools in which there are some strangers, and they are included in this amount. In the other schools, the strangers' children pay direct to the teachers, and are not included in this amount; only 103 strangers' children are included here.

14024. Have you the whole sum paid by the workmen stated there?—The whole sum paid for fees by the workmen is 520 *l.*, taking the fees off that are paid by strangers.

14025. The total income is 1,202 *l.*?—Yes.

14026. And you say that out of that, 520 *l.* is paid in the shape of fees by the workmen?—£. 520 is paid by fees, and 610 *l.* is paid by a per-centage upon the men's wages.

14027. Then the 1,202 *l.*, with the exception of what is paid by the 103 strangers, is paid by the workmen?—Yes; had it not been the vacation period just now, I would have separated the strangers' children entirely, but the teachers are mostly now on vacation, and it is only since Monday night that I have prepared that statement in the form in which it is.

14028. And you say that there is an annual deficiency of 458 *l.*?—I do.

14029. Paid by Messrs. Merry & Cunningham?—Paid by Messrs. Merry & Cunningham.

14030. Do you publish any printed accounts?—No, we have never done so.

14031. Have the workmen expressed a desire to have such accounts?—Never. I never heard such a desire expressed at all.

14032. Would there be any objection to publishing the accounts?—None, except for the feeling which the teachers might have against publishing their salaries.

14033. Do you consider that a reasonable objection of theirs?—There is generally a strong objection on the part of any official to having his salary made known.

14034. Do not you think that the desire of the workmen to know how their money is spent is more worthy of being considered than the unwillingness of the teacher to have it known what has been received by him?—The question has never been mooted at all.

14035. Speaking of your own opinion, do you think that the workmen ought to have an account published?—I do not think we should have any objection to it at all.

14036. The deduction from the wages of the men are not optional, but they are compulsory deductions, are they not?—They are.

14037. Have you many Roman Catholic children?—I could not state how many, but there are a number attending the school.

14038. Have you had any difficulty with them or with the priest about attendance at the school?—I have heard from the teachers that the priests do use their influence to prevent the children coming; but I have never heard any complaints from the men.

14039. Are there any purely Roman Catholic schools in the neighbourhood?—At several of the works there are.

14040. Upon whose land are they erected?—At Ardeer Works the school is near to a town, and at the Glengarnock Works it is near to a village, the ground belonging to Lord Glasgow.

14041. Mr. *Greenall.*] This statement which you have put in shows that the proprietors of these collieries have spent about 5,000 *l.* in the erection of schools?—They have done so.

14042. And that there is a deficiency of something like 500 *l.* a-year, which is supplied by the proprietors also?—Yes, if you take into account the interest at 5 per cent. But over and above that there is about 200 *l.* annually paid to the teachers to make up a deficiency; and moreover they give a certain annual allowance to each school for a pleasure trip, which is not taken into account.

14043. So that had the proprietors of these collieries been so unwise as to have built no schools, they would have saved an expenditure of 5,000 *l.*?—Yes; and you will observe, too, that there is only one of the schools, the Carnbroe school, which obtained a Government grant.

14044. *Chairman.*] You also wish, I believe, to put in a paper relating to wages paid, and sums advanced out of wages?—Yes. (*The Witness handed in the same.*—Vide *Appendix.*)

14045. What are your pays?—In some cases monthly; in others fortnightly.

14046. Are most monthly, or most fortnightly?—Most are monthly.

14047. What proportion are fortnightly?—We have nine places where the pays are monthly; and I think four where they are fortnightly.

14048. It is stated here that the amount of purchases by workmen at stores out of these cash advances, is 51,800 *l.*, which is equal to 47 per cent. of advances, or 21 per cent. of wages; and besides that, there are sales to the extent of 24,500 *l.* yearly; do you mean sales to the workmen, or sales to the public?—To workmen and public both.

14049. Have you any means of knowing how much of that 24,500 *l.* is laid out by the workmen, and how much by the general public?—I should say that, perhaps, a fifth or sixth of the amount would be laid out by the general public, 4,000 *l.*, or so.

14050. So that, altogether, that would add to the 51,800 *l.* which is laid out by the workmen out of the advances made to them, about 20,000 *l.* out of the money which is paid to them at the regular time?—Nearly so; I am considerably within the mark when I say that the expenditure of the general public is about 4,000 *l.*

14051. The result would be that about 70,000 *l.* is laid out by the workmen at the stores, out of a total amount of wages of 243,000 *l.*?—Something like that.

14052. You state in this paper that the profits on transactions average from 8 to 9 per cent., which would yield upon the purchases from advances, about 4,500 *l.*, and upon the entire sales, 6,600 *l.*?—Yes; that is taken at 8¾ per cent., which is above the average.

14053. You estimate the profits that Messrs. Merry & Cunningham make from their stores, including the entire profit that they make from the general public, at 6,600 *l.*?—I do.

14054. There are 11 stores in all, and three works without stores, you state here?—Exactly so.

14055. Can you give any reason why there should be three works without stores?—In the case of the first of them, the works was established about the time when an enquiry was being made into

into the stores, and we delayed putting up the store at the time.

14056. When was that; do you remember?—Eight or nine years ago: moreover, we had another colliery not very far from that, which we considered the men might go to. At the two other collieries I do not think the question has ever been taken into consideration yet, whether they will put up stores or not.

14057. Are those collieries recently opened?—Yes, within a short period.

14058. What do you call a short period?—Two or three years.

14059. In making those advances, do you give a preference to the men who deal at the stores?—We do.

14060. In what way is that preference shown?—We give them the advances more readily than we sometimes do to the others.

14061. What steps do you take to ascertain that the money paid in advance is spent at the stores?—The whole of the money drawn at the stores is entered in a book, in some cases as a check upon the storeman himself, and also in order to know what is left for the workman to receive.

14062. You keep a constant inspection to see how much each workman lays out?—Not absolutely for that.

14063. But without looking to the purpose, you have the means of satisfying yourselves from day to day, how much the workmen lay out at your stores, of the money advanced to them?—That could be done, but I do not think it ever is.

14064. At any rate you admit that you give a preference in making the advances, to those who deal at the stores?—We do.

14065. Do you keep any spirit stores in these places?—Some of them have a spirit license; others have not.

14066. Have you any means of telling us how much of this 70,000 *l.* is laid out at spirit stores?—I could form no idea of that.

14067. But daily accounts are kept are there not, of the money laid out at all the stores, distinguishing those workmen who lay out their money there from those who do not?—Not strictly daily accounts; we put inquiries to the storemen to furnish that statement which I have handed in, and by making similar inquiries we could find the amount of spirits consumed.

14068. You never made it part of your business then to find how much was spent in spirits, and how much in other stores?—No.

14069. Is there any return made daily to the pay office showing for each workman the money that has been advanced to him, and the money that he has spent at the stores?—There is not, in no case whatever.

14070. Do those who keep the stores receive any account from the workman of the money that he has received at the pay office?—They do not.

14071. Do they not ask him how much he has received at the pay office?—No, they do not.

14072. Is it communicated to them from the pay office?—No, it is not.

14073. You mean, then, that the storekeeper does not know when he is dealing with the workmen whether he has received anything from the pay office?—Not when he is dealing with the workmen certainly. If he liked to go into the advance clerk's office, he could see there what the workman has had, but every one else could see the same.

14074. As a matter of fact, does he go into the advance clerk's office before he deals with the workman, to know what has been advanced to him?—Certainly not.

14075. Would there be any difficulty in your workman getting supplied from other places if you did not keep these store shops?—There would be a difficulty in their getting so good and cheap a supply. Before the setting up of the stores at various works, they had to pay considerably more for their goods, and they were not of so good a quality; and in the case of some of the places where there are stores now there are no shops within miles of those stores.

14076. In which of Messrs. Merry & Cunningham's mines are the stores that distance from other shops?—Take Anwick Lodge, for instance; it is three miles from the nearest place where there is any shop.

14077. Do not you suppose that if the custom of the collieries was not engrossed by these store shops, nearer shops would be started?—They might be started, but they could not supply goods at the same cost to the workman that we do.

14078. Your case is that you supply a cheaper and a better article to the workmen than they could get elsewhere?—We do, and we have been asked to put up stores at places where we have none.

14079. Is it the feeling of the workmen that you do supply them better and cheaper?—Yes.

14080. Should you say that that is the general opinion of the workmen?—So far as I know it is; I never heard a contrary one expressed, and I know that they have expressed a decided desire for stores.

14081. In what instances have they expressed a decided desire for stores?—In the case of those places where we have no stores; in Warwickhill, for instance, we have no store, and they have repeatedly asked the manager to have a store.

14082. How far are they from an open shop there?—There is a shop in connection with another colliery about half a mile from the works, and our houses are within a mile of a village where there are a number of shops.

14083. If you supply better and cheaper goods than the open shops, how do you account for so small a proportion of sales to the general public; you supply them at the same rate as your workmen, I suppose?—Yes; the reason for the smallness of the proportion is that our stores are almost altogether in isolated places, where there are but very few of the public to deal at them, but where there are any of them, they do deal at the stores to a considerable extent.

14084. Do you believe that your workmen feel themselves under an obligation to deal at your stores?—I do not.

14085. Do not they feel that they would be less favourably looked upon if they did not deal at your stores?—Not in the slightest respect; we never say to a man whether he is to deal in the store, or not.

14086. But he would not have the same facilities for getting advances, if he did not?—He would not require them.

14087. Would he get them if he did require them?—Perhaps not so freely.

14088. Mr. *Liddell.*] I understood you to say that there was an inquiry on the subject of stores, about eight years ago?—There was.

14089. By whom was that inquiry instituted?—By a Commission appointed, I think, by the House of Commons.

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14090. It was composed, you mean, of a body of persons who went from place to place, making an inquiry?—Yes.

14091. About eight years ago, you say?—Perhaps more than that; eight or ten years ago.

14092. Then there is a report, I presume, published, of the transactions of that commission, and the results of their inquiry; do you remember the name of the commission?—No; I remember that Mr. Crawford, the Member for the Ayr Burghs, was upon it.

14093. You do not remember whether it had special reference to the sale of spirits in Scotland?—I rather think it had not.

14094. It had nothing to do, you think, with the working of what is called Mr. Forbes Mackenzie's Act?—I think it had nothing to do with that.

14095. Did you ever see any printed report of that inquiry?—No.

14096. You do not know whether they reported in favour of, or against, the system of the keeping of stores by owners?—No; I cannot say how they reported.

14097. You have been very candid in all your evidence; would you have any objection to tell me exactly why you give a preference in making advances to those workmen who deal at your stores?—There are various reasons for that; I might say that one of them is, that we consider it an advantage to the men to have a store near them; and, certainly, if we are at the trouble and expense of keeping up these stores, we like to derive some advantage from them.

14098. You are strongly impressed with the belief, and which you say is confirmed by the opinion of a great many of your workmen, that these stores are for their convenience and accommodation?—Exactly so; and the question has been frequently discussed amongst the members of our firm since so much talk has been made about the stores; I may mention the fact, however, that all this talk appears to come more from the agitators amongst the men than from the men themselves; we have no complaints from the men, but there is frequently a reference to the subject in the public prints; and the question has been put to me, as a manager, and to other managers as well, whether we could do without our stores. Our answer was, that we did not see our way to do without them, or, I believe, the firm would have no hesitation in doing away with them.

14099. Looking at this question as one of the outside public, if you could place yourself in my position in that respect, should you not say there was something suspicious, that there was an ugly look rather about these stores?—I cannot see it.

14100. That there is an amount of pressure put upon the workmen to deal in these stores, which is evident even upon the very candid evidence that you yourself have given?—There is no pressure whatever put upon them; we never ask a man to take advances, or to spend his money at the stores, and he may go where he chooses, either with the advances or with his pay.

14101. But if you do him the favour, and so far alter your regular system of pays, as to oblige him by making him an advance, you think that it is a fair *quid pro quo* to ask him to spend that money at your stores?—We think that seeing that the stores are there, he might do that; we do not ask him to do it; I might state that monthly pays are not all intended to make the people deal at the stores; they are more for the convenience of the master than fortnightly pays.

14102. You say that you do not encourage tick at the stores?—We do not.

14103. Does that place you in a better position as regards the quality of your goods, that is to say, that you can afford to furnish better goods at a lesser price in consequence of having no bad debts and no system of credit?—Most certainly we can; I am told by parties now in the works that, before the stores were started, they paid at least a fourth more for their goods than they do now, and they were not of so good a quality; as to the quality of the goods, the general public themselves testify to that by dealing with us; I believe that Mr. M'Donald himself can testify to that, as he deals at the stores.

14104. These advances are advances out of the monthly pay, as I understand you; do you find that where a requisition comes to you from the workmen for fortnightly pays, that class of workmen more frequently ask for advances than the class of workmen who are content with the system of monthly pays?—I have never had a requisition for fortnightly pays; I had a requisition lately from the men who are getting fortnightly pays now for weekly pays; I suspect because they did not know what else to ask for; but in answer to the second part of your question, I may state, that the largest per-centage of money lifted during the course of the pay is at the place where we have fortnightly pays.

14105. *Chairman.*] You mean that there is a greater per-centage of advances in fortnightly pays than in monthly pays?—Yes.

14106. Mr. *Liddell.*] Then am I correct in supposing that the class of workmen who ask for fortnightly pays, and who ask for advances as a rule, are a less provident class than those who are content with the general system of the monthly pay?—I have never had any requisition for fortnightly pays, and therefore I cannot draw any distinction in that respect; but I should say that those who ask for advances most frequently, are generally the most improvident.

14107. And that the steady workmen who manage their family matters the best, are those who are paid monthly?—Yes, a large proportion of them never ask advances at all.

14108. About spirit licenses; you say that you take out spirit licenses at several of your stores; not all?—Yes.

14109. What is the system of granting spirit licenses in Scotland; are they granted by the magistrates?—By the justices of the peace.

14110. Corresponding to our magistrates?—Yes.

14111. Do they ever make any objection to giving a license for the sale of spirits to a store that is in the hands of the owner, or are the owners often magistrates themselves?—The owners are, generally, I think magistrates themselves in some or other of the districts.

14112. Supposing that the owner of a particular work or colliery is a magistrate for that district, would the law recognise his granting a license to his own store?—I could not speak as to that.

Mr. *Burns.*] He would be quite excluded.

Witness.] I know that on a given case coming before the justices of the peace, they are sometimes not allowed to sit.

14113. Mr. *Greenall.*] If a workman obtain an advance of a given amount, is he compelled to expend a sum equal to that amount at the stores?—Not at all.

14114. The Chairman asked you a short time ago about the amount spent in spirits, and you said that you did not know; perhaps, however, you can say how much money is paid by the concern to the spirit merchant, from whom the spirits are purchased?—I said to the Chairman, that by making the same inquiry of the store men as we have made to arrive at the information already possessed, we could arrive at that also.

14115. Mr. *Liddell.*] These licenses to sell spirits are in all cases applied for in the name of the storekeeper, are they not?—They are.

14116. And for the sale of spirits not to be consumed on the premises?—That is so.

14117. Mr. *Greenall.*] I take it that the amount paid for spirits is included in the amount stated in the return which you have handed in?—Yes.

14118. How are the managers at the stores paid?—By an annual salary.

14119. What is the amount of their salary?—There are different amounts.

14120. Mr. *Foster.*] I think you stated that at the Warwick Hill works you had no store?—We have none there.

14121. How often are the pay days?—Fortnightly there.

14122. Have you any other works where there are no stores?—We have two others—Haughhead, and another at Wishaw.

14123. How often are the settlements there?—Fortnightly also.

14124. Do you make advances at those collieries also, if requested by the men?—We do, and we have an equal, in fact we have a greater difficulty in getting men there than at the places where we have stores. Warwick Hill and Annick Lodge are two collieries similarly situated with regard to other things, and we can always get a better supply of men at Annick Lodge, where we have a store, than at Warwick Hill, where we have none. I was told yesterday by a coal master, that in a district where he could not get men to go at all without a store, he had just put up one.

14125. *Chairman.*] Have you ever heard of co-operative stores among workmen in Scotland?—I have.

14126. Has there been any desire among the workmen in Messrs. Merry & Cunningham's works to establish a co-operative store?—I have never heard the slightest desire expressed for it.

14127. But if the workmen had co-operative stores, they might make that profit which Messrs. Merry & Cunningham are now making, might they not, supposing they were well managed?—Yes, if they were equally well managed, they might.

14128. If they were equally well managed, that 6,000 *l.* or 7,000 *l.* profit might go to the workmen?—Yes.

14129. But your attention has never been specially directed to co-operative stores?—They have never expressed the slightest wish to have them.

14130. And no such stores have come under your observation?—I know there are such stores, but I have no means of knowing how the working is carried on.

14131. Have you any means of knowing whether they are successful where they exist?—I have no means of knowing that at all.

14132. You wish to make some corrections, I believe, of an answer of Mr. McDonald. Will you refer to the place, and state what it is you wish to correct?—It is with regard to the alleged inducement to purchase spirits. Mr. McDonald has said that the workers will get spirits when they will not get provisions; we quite deny that, and we discourage as much as possible the sale of spirits at the stores.

14133. What is the passage in Mr. McDonald's evidence to which you refer?—It is contained in the answer to Questions 7136, 7137, and 7138.

14134. In answer to Mr. Foster, Mr. McDonald says, "My experience (and it is confirmed by the complaints that have reached me from wives and children) is, that they will willingly give drink to the drunken, improvident workmen, when they will refuse food to the children in many of these stores. When the man may have nothing lying in the office, if he goes and applies for drink, being an improvident, worthless person, they will give him drink, while if the wife or children were to go for food, they would not give them food. They will give drink to a man on credit, to be deducted from him again when he comes to take out his money; I have complaints in numberless instances made to me of such cases," and when this question is put to him, "Have you every reason to believe in the truth of those complaints?" he says, "I have every reason to believe in the truth of them"?—I have reason to believe that they are utterly untrue.

14135. You simply deny the correctness of the answers to those three questions?—Yes.

14136. I am requested to ask you whether the stores have cages; perhaps you will first explain what is meant by "cages"?—I was never in Woodhall store; there are none of the stores with which I am connected in which they have any cages. What is meant by "cages" I do not know.

14137. Mr. *Foster.*] Have not you any idea what they are?—I have an idea what is meant; at one time they used to have places entirely for selling drink, which went by that or similar names, and I apprehend that that is what the term "cage" means, but I only surmise that.

14138. Do you know of any such places at the Woodhall store?—I have never been in the Woodhall store, and I know nothing of it; but in all the stores with which I am connected, or which I know anything at all about, we have no such place.

14139. *Chairman.*] Then there is another statement of Mr. McDonald's, that you, I believe, wish to contradict, in answer to Question 7125. "They do not prevent other people keeping shops in the neighbourhood, but I can say what they do. Very commonly they have spirit licenses for themselves (the firm I refer to, Merry & Cunningham, have 11 spirit licenses, I think, and they have 11 missionaries too), and they fight to prevent any other person from having a spirit license in the locality; they get the justices' influence to prevent any other person from having a license, so that the whole of the trade must go to them"?—I have to say that that is also untrue.

14140. What other persons have licenses in the neighbourhood of Messrs. Merry & Cunningham's collieries?—At the Glengarnock works,

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works, where I am situated, there are half a dozen within half a mile; there are five at least.

14141. Half a dozen persons having spirit licenses not in connection with Messrs. Merry & Cunningham—None of them at all in connection with Messrs. Merry & Cunningham.

14142. Not in any way connected with them?—Not in any way whatever.

14143. Is that Glengarnock colliery one of your great collieries?—It is not so much a colliery as an iron works.

14144. How many spirit licenses do Messrs. Merry & Cunningham's storekeepers take out?—Nine, I believe.

14145. And how many of them are at these works?—One.

14146. It is stated in the answer to which I refer, that there are 11 spirit licenses?—That refers to 11 distinct districts, situated miles from each other. Some of those are in Ayrshire, some in Lanarkshire, some in Renfrewshire, and one in Dumbartonshire; they are scattered up and down wherever they have collieries.

14147. What are the class of people that have got these five other licenses that you spoke of?—Some of them have been brought up to that business, I think, and others are workmen that have saved money.

14148. Mr. *Greenall.*] Can you tell what would be the united population in those places where the 11 spirit shops are?—If they were all gathered together it would be from 20,000 to 30,000.

14149. *Chairman.*] You wish to say something about the limitation of the output, I believe?—I do. The darg has been frequently alluded to; but I have never yet heard the most recent limitation mentioned, and I merely state it in order to show that the men, if really anxious about anything, could get done by themselves all that it is proposed to do by this inquiry. For the last four months, nearly the whole of the colliers in Scotland have limited the day's darg by one-fifth. They have done this in spite of the masters, and they are still continuing to do it. They commenced to do it at some of our ironstone pits, and as we are not so immediately dependent upon them for the supply of ironstone as for coal, they have stopped it there, but they still keep it up at the pits for the sole purpose of keeping down the stocks. The masters find it necessary to meet this at present by blowing out a number of the furnaces.

14150. Mr. *Liddell.*] Do I rightly understand that there has actually been one-fifth less coal raised lately in Scotland than there was four months ago?—Yes.

14151. Has that had no effect upon prices?—It has affected them to a material extent; the price of coals is up now.

14152. Can you say how much?—The wages have risen also, but they are from 1 *s.* to 2 *s.* per ton up.

14153. And this is the summer season?—Yes.

14154. Mr. *Greenall.*] What is the price?—The price just now is 8 *s.* at the shipping ports, I believe, or something like that. The prices before used to be 6 *s.* or 7 *s.*

14155. That is to say, there is an advance of 25 per cent.?—Very nearly that.

14156. Mr. *Foster.*] The advance in the price of coal is in consequence of a number of the colliers being on strike, I suppose?—It is more on account of this limitation of the darg. I do not think that there are any of those working for the coal masters on strike, because they have found it necessary to give in to the men, and to look over this limitation for the meantime.

14157. I suppose that at the collieries connected with iron works, the coal drawing is at a standstill?—Yes; at a great number of them.

14158. Mr. *Greenall.*] You said that coals had risen from 6 *s.* to 8 *s.*; what have wages risen in the same time?—About 1 *s.* 6 *d.* or 2 *s.* I am not certain whether they had got the advance previous to this limitation or not.

14159. One shilling and sixpence a day, you mean?—Yes.

14160. Would that be the same per-centage as the rise of prices upon the coal?—Much about the same.

14161. *Chairman.*] How much have the average hours of work diminished with the diminution of the output?—Two to three hours.

14162. What were they before?—About 10 hours.

14163. And they are now reduced to eight?—Seven or eight. Our men that were working 9 to 10 hours when there was no limitation, work now from six to seven hours.

14164. What are the hours of boys in your mine?—The same as the men. When the men are limited, of course they are also at work for a shorter period; but previous to the reduction, the general length of their day was from 9 to 10 hours.

14165. Both for men and boys?—Yes.

14166. And the men are now getting more wages for fewer hours of work?—Yes, they are; of course they are getting less than they might earn by working longer.

14167. In what proportion has the whole output diminished?—By about one-fifth.

14168. In what proportion are the hours of labour diminished?—Just about the same.

14169. You wish to say something about sub-inspectors and pupil inspectors, I believe?—Yes, more especially with reference to the suggestion of Mr. Woodhouse. We would decidedly object to have pupil inspectors coming into the pit; they would take up a great deal of the time of the overmen in showing them over the pit, and be of no practical value. I do not think that an inspector could at all direct upon any question reported to him by these pupil inspectors without investigating it himself after that report, so that in reality they would increase his work by inquiring into things that were not needing his attention.

14170. In the collieries with which you are connected, are there any mining engineer's pupils?—No.

14171. You have not known that in any colliery with which you have been connected?—Not with ours; ours are not so extensive as to employ men of that class.

14172. Supposing that you do not allow pupil inspectors, or the pupils of mining engineers, to go down pits, how are people to become qualified for the work of inspectors?—There are plenty of mining engineers in the country who visit the mines officially for the owners, and they can be trained up in the same way as these proposed sub-inspectors would be.

14173. And those mining engineers have pupils?—Yes, decidedly; but not connected with the collieries.

14174. It is from that class, you think, that inspectors of mines might be selected?—Yes.

14175. Mr.

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14175. Mr. *Liddell.*] Do you think that skilled and experienced overmen and mining engineers of long practice would be apt to listen with much patience to suggestions coming from a pupil inspector?—They would not; they would find it a very difficult thing to deal with. Young men have such crude ideas about things that they generally propose theories which are quite unworkable, and it would only be taking up the inspector's time if he were to listen to some of their recommendations.

14176. And men of the class I have spoken of would probably naturally feel something like indignation at being overlooked, as a species of *espionage* being exercised over them by a set of young men of that description?—They would.

14177. Do you think that the owners would go the length of absolutely refusing them admission into the pits at all?—I do not think they would do that; I do not see that they could do it; they might refuse to accompany them over the mines.

14178. But, supposing that there was no law requiring the employment of these persons, and that the inspector merely said, "Will you let this young man attend regularly to your colliery?" Do you think that many owners would grant the inspector that permission?—None of them would, at all, I think.

14179. Consequently, any scheme based upon the voluntary system would break down utterly?—It would.

14180. Mr. *Foster.*] You do not agree with the remark of Mr. Woodhouse, that a system such as he proposed would not meet with any opposition whatever from the masters?—Quite the reverse.

14181. *Chairman.*] Is there any other statement you wish to make to the Committee?—There is nothing else, except that I wish to state that we do not send away men for not dealing at the stores.

14182. You wish to deny the allegation that you send away men for not dealing at the stores?—I do.

William Burns, Esq., again called in; and further Examined.

W. Burns, Esq.

14183. *Chairman.*] You wish to make some further statement to the Committee, I believe?—I wish to offer a very short explanation, which is suggested by questions which have just been put to the preceding Witness about the limitation of the output. I took the trouble of looking out certain numbers of the "Glasgow Sentinel" newspaper, which is admittedly the organ of the miners in the West of Scotland, containing reports from week to week of what passes at their meetings, where Mr. McDonald is in the habit very generally of addressing them. In the "Sentinel" newspaper of the 20th of January last, under the head of a "Great Meeting of Miners" Mr. M'Donald had occasion to make an address, from which this extract is taken, and which I noted down in my memorandum book. "Mr. M'Donald then referred to the reduction of the stocks of coal and iron and urged a further reduction by which they might depend on getting higher wages as they reduced the stocks."

14184. That means a further reduction of the darg, does it not?—A further reduction of the stock of coal and iron; at least, I so read it. Then in the "Sentinel" of the 17th of February last under the head of a "Meeting at Stevenston" (that is one of Messrs. Merry & Cunningham's collieries, sometimes called Ardeer Colliery, and sometimes Stevenston), in reference to the restriction of out-put, "Mr. McDonald said he was confident that if the movement was thoroughly carried out, there would be a reduction of material of fully three millions of tons for 1866. Last year twelve millions were required, and if they could only give the masters nine millions instead of twelve millions, they might depend upon it they would soon have 6 *s.* a-day in place of 4*s.*" In the "Sentinel" of the 12th of May 1866, and under the head of "Great Conference," Mr. M'Donald addressed his hearers to the same effect, the reduction of the out-put. And on the 2d of June 1866, under the head of "State of the Trade," he addressed the men on the same subject as to the reduction of the stocks of iron-stone and coal. That is the explanation which I wished to make.

14185. *Chairman.*] (To Mr. *McDonald.*) We will not enter into a controversy as to the merits of these statements, but do you admit the correctness of the statement which has just been made?—I admit every word of it, believing that regulating the supply in proportion to the demand, necessarily enhances the price.

Witness.] I am not discussing political economy, but merely giving facts.

Mr. J. W. Day, called in; and Examined.

Mr. *J. W. Day.*

14186. *Chairman.*] I believe you have one or two statements to make to the Committee?—Yes; with respect to the employment of boys under the age of 12, I may state that I sent out similar queries to those which the Committee have seen here, to several coal owners, and I have taken 90 of the returns to those queries, at random, to see the number of boys employed under 12 years of age.

14187. Where did you receive these returns from?—They are returns from 90 of the largest collieries.

14188. Who gave you those returns?—The owners of the collieries. As I have said, I have taken 90 returns at random, and I find that in 54 of those 90 collieries, no boys are employed under 12 years of age, and that at the other 36 the number employed is 677. Two of these places alone employ upwards of 200 in the thin seams and in the iron works. There seems to be an impression abroad that a great many more boys are employed under 12 years of age than is actually the case.

14189. From what part of the country are these returns taken?—From all parts of the country.

14190. In arriving at that result, you did not select the works where there were fewer boys than at other works?—No, I just lifted these 90 returns as they laid.

14191. Do you consider, from what you know of the working of collieries, that that number of

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boys represents the proportion of boys employed in all the collieries?—I should say it does. The simple question which was put to the owners was this, "How many boys are employed at your colliery between the ages of 10 and 12?" In taking these returns, I did not look to see where they came from, but merely took the answers to that question.

14192. That number would only give about seven boys per colliery, if you took the average of the 90 collieries?—At 54, there are none employed; that makes 18 per colliery at those where they actually are employed. Then for one moment I wish to draw the attention of the Committee to some remarks which were made here as to the employment of pupil inspectors. The first Mines Inspection Act was passed in 1850, and contained this clause: "And be it enacted, that no person who shall act or practise as a land agent, or as a manager, viewer, or agent of, or be otherwise employed in any coal mine or colliery, shall act as an inspector under this Act." That provision, however, did not prevent inspectors from taking other employment.

14193. Mr. *Kinnaird.*] What does this bear upon?—It bears upon the evidence which was offered here, advocating the inspector's taking pupils. I wish to answer that. I have already read the clause in the Act of 1850. In the year 1855 we had complaints that some of the inspectors were in the habit of taking references and becoming otherwise employed, they having the power to compel plans to be produced. The late Mr. Nicholas Wood and I went to Sir George Grey, then Secretary of State for the Home Department, upon the subject, and pointed this out to him, and he altered the law so far, as to prevent inspectors taking any other employment, and introduced into the Act of 1855 after "No person who shall act or practise as a land agent, or as a manager, viewer, or agent," these words: "or mining engineer or valuer of mines, or arbitrator in any matter of dispute arising between owners of mines," and then the clause is a continuation of the clause in the former Act, "or to be otherwise employed in any coal mine or colliery, shall act as an inspector of coal mines under this Act."

14194. *Chairman.*] What conclusion do you draw from that provision?—I wish to point out that it was considered so improper that the inspector should have the power of going into the pits and have plans produced for his information, to use in cases of arbitration or disputes, that the Act was specially altered in the year 1855, so as to provide against it. The proposition which is now made for these pupils to go into the pits would even be worse than the inspectors having that power.

14195. But under the Act of 1860, the inspectors have a right to have maps produced, have they not?—Yes, but that portion of the Act of 1855, which I have read, prohibits them from acting as arbitrators, and giving information to other people.

14196. Are the Committee to understand you to object to that portion of the Act of 1860?—I do not object to it; I simply call attention to this provision as an answer to Mr. Woodhouse's proposition, and explain why the law was altered.

14197. You wish in fact to call our attention to the course of legislation on the subject of inspection?—I wish in answer to the recommendation made by Mr. Woodhouse, to point out the fact that the law was altered in the way which I have described in order to meet that objection.

Thursday, 19th July 1866.

MEMBERS PRESENT:

General Dunne.	Mr. Kinnaird.
Mr. Fawcett.	Mr. Liddell.
Mr. Greenall.	Mr. Neate.

CHARLES NEATE, Esq., IN THE CHAIR.

Mr. JOHN NORMANSELL, again called in; and further Examined.

Mr. *J. Normansell.*

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14198. *Chairman.*] THERE is a statement made by you, in answer to Question 3304, as to the number of tons which were gained to the workmen, and to the master, in consequence of the change from measuring to weighing; according to your evidence there was an increase of 14,000 tons paid for in the course of 12 months, by reason of the change from measuring to weighing?—Yes.

14199. That statement has been controverted by Mr. Platts, in his answer to Question 12600. You wish, I believe, to show the Committee the grounds upon which your original statement was made; will you do that as shortly as you can?—Yes. In the year 1863, when I was prevented from going to check the men's accounts at pit No. 2, I was asked by the men who had employed me, to just take the weight for 12 months, and strike the average as to the overweight, so that we might place it on record, in order to show that the weighing principle was not only beneficial to the men, but that it was also beneficial to the employers. Consequently I did so; and, to show the Committee how I arrived at that, I may state that we have weighing books in which, in the case of every corf that comes out of the pit, no matter what it weighs, the net weight of it is booked; and, in the evening, when we have done drawing coals from the pit, we add them up and make them into tons; setting down at the bottom of these sheets (*producing the same*) so many corves, so many tons, and so many cwts. We then transfer it from those sheets to these sheets (*producing the same*). That is where the corves are taken down (*pointing to one of the sheets*), and here is where they are transferred into what is called the daily ledger (*pointing to another sheet*). We make up the accounts every fortnight, and carry the accounts from the ledger to the fortnightly check-sheet. If a man sends up 100 corves per fortnight we place his number here (*pointing to a sheet*). All that I had to do was to collect 26 of these sheets, that is to say, to take one, and to follow it on for 26 fortnights, and take from the bottom the totals both of the tons and of the quantity of corves drawn, reckon up the corves, and strike the actual difference. Say, for instance, there are so many thousand tons drawn, and so many corves that have brought out so many thousand tons; we strike the result at 5½ cwt.; that is the average weight given, and it leaves us a balance of 14,000 tons overweight in 12 months; and I may say that there was a little over 100,000 tons drawn in that 12 months.

14200. Where did you get this statement?—From our own books.

14201. From the check weighman's books, do you mean?—My own books; I was the check weighman.

14202. You got it, then, from your own books, as check weighman?—Yes; and our accounts were tallied every fortnight with the employer's accounts. The employers, however, do not take an account of the corves; we merely take an account of the corves for the information of the men; but the employer's weighmen do not take any account of the corves, so far as reckoning them up is concerned, they merely take the weight. We put it down here (*pointing to the sheet*) for each man, and give each man a check note. The employers take no notice of the number of corves, and to find it they would have to get their weigh books for 12 months, and reckon up for every day what was sent out of the pits, whereas we kept an account as it went on.

14203. Comparing the result of that inquiry for 26 fortnights with the supposition of what would have been the amount if every corf had been paid for at the rate of only 5½*d.* cwt., you find a difference of 14,000 tons, as I understand you?—Yes. This was when I was at the pit No. 1; but I may also state that this 14,000 tons is from the whole of the Silkstone mine; that is to say, from pit No. 1 and pit No. 2. There are two pits, but all down to one mine, and the coals used sometimes to come out of pit No. 1, and sometimes out of pit No. 2, and the weighers were mixed together. I took the whole of the accounts that came out of the mine from both pits, so that there are two drawing pits to realize that 14,000 tons, though there is only one mine. The weighmen came occasionally from pit No. 2 to pit No. 1. There were three of us to take those calculations, and we were very cautious over it.

14204. Mr. *Greenall.*] Your calculation is based on the number of corves, as I understand you?—It is based on the number of corves.

14205. Are you sure that you are correct in the number of corves?—We must be correct; we add them up every fortnight; we have the

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number on those large books that I have given a copy of to the Committee, and we reckon them up every day.

14206. How do you take the number of corves? —We take them from the bottom of these sheets, and we are obliged to be correct, because, if we are wrong in the number of corves, the miner soon comes back to us to ask how it is we are wrong.

14207. *Chairman.*] Your statement applies, I think, to a different time from that to which the statement of Mr. Platts refers. What year does this statement of yours refer to?—It is a part of 1862 and a part of 1863; the latter part of 1862 and the former part of 1863.

14208. How do you know that that statement as to the weight was correct?—Because there are not only my own weigh books, but there are the weigh books from pit No. 2 as well.

14209. Have these accounts been compared with the accounts kept by the mineowner?—Yes, with reference to the tons; but they do not take the quantity of corves at all.

14210. The value of the information depends upon the manner in which these sheets were made up?—So far as the value of the information is concerned, I only wish to show the Committee how I have arrived at it, because I have no interest in showing them anything but the truth.

14211. Mr. *Liddell.*] I understand your calculation to be arrived at by taking the number of corves, of which you have a return, supposing every corf to average five and a half cwt.?—Every corf was supposed to hold five and a half cwt., and we take the whole amount of tons that is produced from so many thousands corves; I can show the figures (we have them in print) showing how we have done it.

14212. What I want to know is this: how do you know, inasmuch as you do not weigh every corf, or more than one probably in 50, that each of those corves did contain an average of five and a half cwt., because that is what it comes to?—We weigh every corf that comes out of the pit; we do not merely weigh one every two hours, or one out of every four; but every corf that comes from that mine and from all the mines is weighed, and that is the way we get it out. Some would be not five cwt., and others would be eight cwt., and we strike the average at five and a half cwt., and putting five and a half cwt. to every corf drawn, in 12 months there was a net balance of 14,000 tons.

14213. I understand you, then, to say positively, that you weigh every corf?—Yes.

14214. Mr. *Greenall.*] And you know the number of the corves?—Yes.

14215. Does the proprietor of the mine keep an account of the number of corves?—He does not keep an account of the number of corves at all, no further than putting them down on these large sheets, and there they remain, because it is merely the tons of which they keep an account, and the men are paid by the tons. What we take the number of corves for is merely to satisfy the men. Each man puts down the corves that he sends up, and reckons them up for 12 days, and he likes to have on his check note as many corves as he has sent out. When the weight is put opposite his corves he sees at once how much over weight he has gained over and above his average weight.

14216. Then, there is an account kept by you or by some other party representing you on behalf of the miner?—Yes.

14217. Is there a similar account as to the number of the corves kept by any party on behalf of the owner of the mine?—The weigher, on behalf of the owner, books the corves just in the manner that we book them in the day book; but he does not carry them forward anywhere else, whereas, we transfer them twice after that; we transfer them to the ledger book, and then from the ledger book to the men's check notes.

14218. And out of those elements you make that account and arrive at 14,000 tons?—Yes.

14219. *Chairman.*] The mineowner has no corresponding accounts upon which to make up his statement?—If he wished to make up his statement in the manner I have done, he will have to take the day books for every day's produce, and reckon every day's corves back for 12 months; the owners have no other way of arriving at it, because they have let them go behind.

14220. Supposing the name of a workman to be John Thompson, the pay clerk would enter John Thompson's name in his book, not for so many corves, but for so many tons, would he not?—Yes, for so many tons.

14221. There also would a day book, in which the number of corves that John Thompson sent up would be entered, would not there, that is to say, there would be in the master's book the number of corves that John Thompson sent up each day?—In the weigh-house book, but not in the office book; they never take in the office at all an account of the tubs.

14222. In the account kept between the pay clerk and his employer, there is no account kept of the number of tubs, you mean?—No account; there are a great many of the men there that reckon to send seven tons of coal on a score of corves (that is 20 corves), that is seven cwt. per corf, and others will send six tons to the score; if there are 100 corves, we will say, that is 30 tons. That 30 tons is merely put down in the office without any account of the tubs.

14223. Does the pay clerk get his account from the weigh sheet?—He gets it from the weigh sheets or weigh books, whatever we term them; but he gets the tons; he does not get the number of corves, he never knows anything about that.

14224. Does not the pay clerk make out his account from the weigh books?—He does, but he never takes the corves; he takes simply the tons.

14225. Does he not see in the weigh book that so many corves would make so many tons?—No, he does not; that is to say he does not reckon them up; he sees that there are so many tons at once, and he does not count the corves at all.

14226. If one man sends up 10 corves, does not the clerk find 10 entries in the weigh book?—It does not matter how many entries there are; he simply runs them up and counts the tons.

14227. There was a statement made in Mr. Cooper's evidence, that the error arising from the friction of the weighing machine to which you had referred was in favour of the workmen?—Yes, he said so.

14228. You have had some considerable experience in weighing machines, have you not?—Yes, I have.

14229. Can

14229. Can you conceive how in any way that could have been the case?—I have been connected with weighing machines from 1859 to 1865, and I have seen the friction of weighing machines; I have had three weighing machines under my charge, and I never saw the friction to operate in the men's favour.

14230. Do you understand how the friction could operate in the men's favour?—I cannot understand how it could operate in the men's favour at all; I always found the friction against the men; that is my experience of weighing machines.

14231. From your experience of weighing machines, are they likely to get out of order?—Yes, some are, in particular; the best weighing machines, as I have stated in my evidence, for keeping in order are Pooley's patent, of Liverpool. There are some home-made weighing machines that are liable to get out of order.

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THOMAS WYNNE, Esq., called in; and Examined.

14232. *Chairman.*] YOU are the Inspector of what district?—For North Staffordshire, Shropshire, and Cheshire.

14233. How many collieries have you under your inspection?—Rather over 300.

14234. By "collieries" you mean distinct collieries, not pits?—No, distinct collieries; but where one person owns two or three collieries, if they are distinct collieries, I enter them as such.

14235. And those collieries represent a larger number of pits, of course?—Yes, I daresay 700 or 800.

14236. How long have you been inspector?—Nearly 15 years.

14237. What is your practice as to inspection?—To strictly inquire into the cause of any accident that may happen, to attend to any information that may be given me; and, if I have any more time, to go to any place that I think is the most dangerous.

14238. Do you visit collieries without any information?—I do, but not as a rule.

14239. How often in a year do you go into a colliery without any special circumstance arising to induce you to visit it?—I could hardly state off-hand, but I daresay it will be something like 40 or 50 in a year.

14240. Are there any collieries in your district that you have never visited?—There are.

14241. How many do you suppose?—I should think there would be 30 or 40.

14242. Can you give any reason why you should have left out those 30 or 40?—There has been no accident at all occurred in them during the time of my inspection.

14243. And you have had no complaint at all about them, I suppose?—No complaint.

14244. As a rule, you do not visit a colliery without an accident or a complaint?—Or for some special reason.

14245. What other reason would there be besides an accident or complaint?—I go where I think it likely that danger may exist.

14246. What other reason could you have for supposing that there was danger except an accident, or information that you might receive?—For instance, take the deep pit at Dukinfield; I very often go there because I am very much dissatisfied with the management.

14247. That is, from having been there before, I suppose?—Yes; I should think I have been down there 20 times; I do not consider that there is efficient management there.

14248. Are you speaking now of the pit in which the recent accident was?—No; the deep pit of Dunkirk Colliery, the Astley Pit, as it is termed.

14249. What induced you to go there the first time before you knew anything special of it?—The great depth of it.

14250. You think it your business, then, to visit collieries of an unusual depth?—Yes.

T. *Wynne*, Esq.

14251. That is, because collieries of an unusual depth would require more than common precautions?—Yes.

14252. That would be one special reason which would induce you to visit that pit?—That has been one of my reasons.

14253. Do you think that you are able to discharge all the duties of your office?—I think so, so far as my idea of those duties go. I think that if I went any further I should be taking a responsibility upon me that does not belong to me.

14254. Do you think that more frequent visiting would tend to better management and to diminished accidents?—Yes; I do think that it would tend to better management.

14255. More frequent visiting, you mean, than you are able to give?—Yes; but I am afraid that it would also act in the other way, because some of the coal proprietors would rely on the inspector rather than on their own management.

14256. Then, upon the whole, you do not think that more frequent inspection would improve the management of mines, especially having regard to the safety of those working in them?—I could scarcely say that, because I think that every visit I pay is doing some good; but I do think it would tend also to make the proprietors look to my visits rather than to their own good management.

14257. That is to say, if there were no complaint from you they would assume that everything was right?—Yes.

14258. You were present at the inquest on the late Dukinfield accident, were you not?—I was, during the whole of the time.

14259. How long before that had you visited that mine?—I think it would be about two years since I had been at that pit.

14260. Were you satisfied with the management of that pit when you were last there?—They had then not very long commenced opening it, and even up to the present time there is no large amount opened; it is a very small colliery even now.

14261. And you had not visited it since about the time of opening?—Yes, I had been once in the pit.

14262. And that nearly two years ago?—Yes.

14263. Near the time of its opening?—No, it had been opened then about a year, but merely in the recovery; they were driving a tunnel, and driving dips to bring the air out of that tunnel.

14264. You visited the pit on the occasion of the inquest, did you not?—I did.

14265. Did you go over it?—I did, in every part.

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14266. From what you saw of it, was there any defect that was likely to have been prevented if you had been there a short time before and given notice of that defect?—I do not think that an inspection on my part would have prevented that accident, because it arose from what it never could be supposed any one would do; it arose from gross neglect on the part of the management.

14267. You say, as I understand you, that the accident did not arise from any defect that would have been apparent to you upon a visit?—It would not have been apparent, because the mischief was in some workings that had been opened about three years before, and had been left standing; workings that I should not have thought of visiting.

14268. Mr. *Liddell.*] Were they abandoned workings?—No, they were driven out; but there was no means of getting the coal away. The dip is about 24 inches in a yard, and the pit not being sunk as it ought to have been, they were 200 yards down below the level of the bottom of the pit.

14269. *Chairman.*] Why should not you have visited the disused workings?—Because there was no reason to infer danger; that would be out of the course of all the workings that had been going on for two or three years; two years at least.

14270. Was it not obvious that gas was likely to accumulate in disused workings?—Not if proper management had gone on.

14271. What do you mean by "proper management?"—The air being sent round those levels.

14272. If you had visited these disused workings, would you not have seen that the air was not being sent round?—There would have been no reason for doing it; no one would have supposed but that this place was ventilated.

14273. When you visit a mine, what parts of it do you visit?—The working places of the mine, to see where the air comes into the workings, and where it leaves the workings, and to see that it is properly disposed of.

14274. If the disused workings are not ventilated gas is likely to accumulate in them?—These workings were ventilated, but not efficiently.

14275. Why is it not part of the duty of an inspector to visit disused workings to see that they are properly ventilated?—Because if we did that, it would entail an amount of labour upon us that we could not possibly undertake, and it would not be of any service.

14276. Why would it not be of any service. Without reference to this particular case, supposing that an inspector visits a disused working and sees that there is not a sufficient current of air to prevent the accumulation of gas, why would he do no good by mentioning that to the manager?—In the case of some pits, for instance, it would take an inspector a whole week to go through the whole workings of a mine, and, speaking generally, it would be of no service whatever; because the air before it comes into the workings ought to be examined to see that it is pure, and when it leaves the workings it also ought to be examined to see that it leaves in a pure state.

14277. That is to say, it would be impossible for the inspectors that there are to find time to visit disused workings?—Yes.

14278. Mr. *Liddell.*] Is it possible to visit old workings?—It is not; not as a rule.

14279. Mr. *Fawcett.*] I suppose when you speak of disused workings, disused workings differ in this respect, that gas accumulating in some disused workings could not endanger the rest of the mine, while gas accumulating in other disused workings would endanger the rest of the mine?—Yes, supposing the air is turned upon the gas, and brought into contact with the lights, instead of sending it direct to the upcast pit.

14280. Then you get the disused workings divided into two classes, one class in which the accumulation of gas would not practically injure the mine, and the other class of disused workings in which an accumulation of gas might possibly produce prejudicial effects to the rest of the mine?—That may be the case.

14281. *Chairman.*] Without going into the disused workings, cannot an inspector satisfy himself by going to the entrance of the disused workings whether a proper system of ventilation is kept up for them?—That is exactly what we do.

14282. What is to prevent an inspector going to the entrance of every disused working to see that there is sufficient provision made for the ventilation of it?—There is nothing to prevent it, and we invariably do so.

14283. That answers the purpose of visiting the disused workings, does it not?—Supposing that the air is not properly applied when it enters a working, it could not be told by any inspector what effect it would have.

14284. Without going through the disused working, then, you could not satisfy yourself as to the ventilation of it?—No, not as to the application of it; we might ensure that plenty of air was going through, but if that air were not properly applied it would not do its work.

14285. There might be odd corners in the disused workings through which the current of air did not pass, you mean?—Yes, that was exactly the case in the instance referred to.

14286. And without visiting the whole you could not satisfy yourself that the ventilation was sufficient?—No, and I never should have supposed for a moment that that place would have been left full of gas.

14287. You think that if you had been to this colliery where the late explosion took place a month before it happened, you still would not have been able to offer any useful suggestion?—I should have made general suggestions about the management, but not as to the particular cause of the accident.

14288. Nothing would have called your attention to the existence of any peculiar danger there?—I think not. The only circumstance that I could imagine as likely to have called my attention to it would have been the fact, that they were driving down towards the spot, and I might have asked the question, "Are you sure that there is no gas in these lower workings?" (*describing their position on the plan*).

14289. When you go to a mine you call for the map of the mine, I suppose?—Yes.

14290. And inquire what is the progress of their different workings?—Yes.

14291. And in this case you might have considered the question whether the new workings were getting into dangerous proximity to the old disused workings?—Yes.

14292. And you think it possible that in that way

way you might have called their attention to it?—Yes, I might have done so, and most likely should.

14293. Mr. *Fawcett.*] You said that you visited the deep Dukinfield pit repeatedly because the mine was generally managed so badly, did you not?—Yes, that has been my reason, especially lately, since the manager left.

14294. You represented to the manager of that mine, probably, the bad state in which it was?—I have done so. I have written to the proprietor to tell him that I hold him personally responsible for what may happen.

14295. Have your recommendations been attended to?—They have not.

14296. Have not you the power under the Act to see that those recommendations are attended to?—The only power that we have is to give owners notice that there is danger to be apprehended, and they have the power of going to arbitration.

14297. I suppose you have the power to make them go, have you not?—Yes. They choose five persons, and one is selected out of those five.

14298. Then why have not you brought that power into operation in this case to which you refer?—It is my intention to do so if there is nothing more done; I having already written a letter to the proprietor, stating what my views are, and stating that I hold him personally responsible.

14299. When was the letter written to him?—The first was written on the 23d of June, and the answer I received was dated the 28th of June, and I replied to it on the 30th of June.

14300. The answer was not sufficiently satisfactory, in your view, I suppose?—It was not.

14301. Therefore, as I understand you, you are going to bring the powers which you possess into operation?—I intend to do so.

14302. Do you think, from your experience, that in cases where their recommendations are not attended to, the inspector ought to be armed with more power?—The only thing I object to is, that we have not the power of choosing one of the arbitrators.

14303. Who chooses them?—The owner of the mine.

14304. Entirely?—Yes; that is to say, he nominates five, from whom one is selected.

14305. You think that that is a defect in the Act?—I think it is.

14306. How deep is this colliery that we have just been referring to?—686 yards, and also 300 yards down an incline of 24 inches to the yard.

14307. Has there ever been an accident there from mismanagement?—Nothing serious.

14308. As to the colliery in which the explosion took place, you say that if you had visited it, it is just possible you might have pointed out the defect?—It is just possible, from the circumstance I named.

14309. On the whole, do youthink youwoul d?—No.

14310. You think the chances are that you would not have pointed it out?—I think the chances are that I should not have done so.

14311. Has there ever been an accident in this colliery before?—Nothing but the breakage of a chain and fall of roof.

14312. You said, I think, that the management of it has been bad?—No mine that ever I have visited has been in so bad a state.

14313. You say that you made your first inspection when the mine was just begun, and you did not make another till the accident happened?—Just so.

14314. If you had visited the mine during that time, would you not have discovered that the management had been bad?—I should.

14315. Without alluding to those particular circumstances which produced the explosion, if the mine had been more frequently inspected, the general bad management would have been discovered, and probably the whole management would have been improved, would it not?—I do not find that the proprietors of mines are very much inclined to alter their management upon my representation; I have now four of the largest in my district which are managed by totally incompetent men, and all my representations seem to have no effect upon them.

14316. Then, in this case, where you say they will not attend to your recommendations, will you, without naming the collieries, say whether you have brought the powers of arbitration into exercise?—There are no powers that I can bring into exercise, unless there is imminent danger.

14317. Then you cannot require an arbitration unless there is imminent danger?—No.

14318. Do you, or do you not, think it would be desirable for the inspector to be armed with further powers, so as to be enabled to meet these cases which you have just alluded to?—I think there would be an objection on the part of the colliery proprietors to letting us have any more power, and I certainly, myself, do not think that it would be safe to entrust inspectors with any more power than they possess.

14319. But if you see a mine badly managed and you point that out, and your recommendations are not paid the slightest attention to, what becomes of the good of inspection?—These are the exceptions to which I have been referring, and not the rule; I find, generally, that my recommendations are attended to.

14320. You do not think that it would be desirable, even in these exceptionable cases, for you to be armed with further powers?—No, I think it would be a dangerous power, and objected to on the part of the colliery proprietors.

14321. Why?—They might think that we were interfering, more than Government ought to interfere, with private property.

14322. But supposing you have a clear idea that it would be to the advantage of the mine, and of the industry itself (because, if you secured the better management of the mine you improve the industry), would it not be desirable for you to have that power?—It would be desirable, but what I mean is this, we should be going too fast; the improvemements that have taken place in the management of some mines are very great, and I am in good hopes that the others will follow when they see the advantage of it.

14323. Mr. *Liddell.*] If you had the power of going into a mine, and saying, "This is badly managed, and I insist upon its being managed in a different way," would not that be practically handing over the management of the mine to you instead of leaving it in the hands of a responsible owner?—It would.

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14324. And that is your objection to arming an inspector with more power, is it not?—It is.

14325. You have now this power, that when a particular part of the mine is, in your opinion, in a dangerous state, you can give a certain number of days' notice, and in the event of your representation not being attended to, you can suggest what is required in the shape of alteration, and can enforce an arbitration upon that point in case of dispute?—Yes, in that form that I have described.

14326. But do I rightly understand you to say that it is only in cases where actual danger in your opinion exists that you could do that?—I conceive that I should be bound to prove actual danger.

14327. I should like to know how you can do that; it is rather a nice point, is it not?—It is a very nice point, and a thing I never like to venture upon unless I am very clear about it.

14328. Because the opinion of a practical and experienced man, giving you full allowance for your own practice and experience, may differ from yours on the particular point in question?—Yes.

14329. And it does, as a matter of fact, sometimes?—Yes, and if we went anywhere too near the wind it would, in my opinion, lower us in the estimation of the people.

14330. You mean by that, I suppose, that if you disputed as to whether the ventilation, for instance, in a particular part of the workings was sufficient or insufficient, and it was found to be sufficient, you would have shown ignorance in the opinion so expressed, and it would lower you in the estimation of the public?—Yes, and show a captious spirit.

14331. You said, I think, that you had been 20 times down Dukinfield deep pit?—I should think I have at least that.

14332. We will take the first time you went there; did it strike you then that the management was defective?—The management then was in better hands.

14333. Then it has only fallen into less skilful hands latterly?—They have done away with the manager altogether; they have promoted an underlooker, and called him manager.

14334. I understand from that answer that the defective state into which the working and management of Dukinfield deep pit has fallen is in consequence of placing an incompetent man in the position of manager?—A better man there could not be for the position he was formerly in, but with a mine of that depth, and certain things arising that do not arise in shallow mines, in my opinion it wants a man of mind to manage it.

14335. This man has, then, actually been taken from the working class?—He has.

14336. And, in fact, he has been taken from the class which the workmen themselves have suggested as the class from which sub-inspectors should be selected?—I hardly know what they have suggested on that point.

14337. He is, as I understand you, a thoroughly practical man in the ordinary working of the pit, but not of the scientific attainments necessary to meet the difficulties of managing a pit which in itself is particularly difficult to manage?—Yes, he is as good a man as I have ever met with in his place; but I think that the deepest mine in England requires better management than he can be expected to give to it.

14338. He is not the right man in the right place?—No.

14339. Mr. *Greenall.*] I understand you to say, that as an inspector, if you were to believe danger to be imminent in any pit you visited, you would, without any hesitation whatever, proceed to apply such powers as you have?—I should at once apply to the Home Office, so that I might not take any step of that kind without their sanction, and they invariably have given their sanction when I have applied for those powers.

14340. In your 15 years' experience, have you often referred matters of that nature to the Home Office?—Not very often, but when I have I have always met with every support.

14341. And what has been the issue of those cases which you have referred to them?—I have succeeded in every case.

14342. The arbitrators have taken the view which you recommended?—They have.

14343. In all cases?—Yes.

14344. *Chairman.*] Do you think that it would be desirable by legislation, or that it would be possible, to raise the qualification of managers of mines?—As managers, I think that is quite open to improvement.

14345. From your experience are the managers, as a class, equal to the position?—It would be difficult to answer that question, but there are a vast number who are not equal to it.

14346. Have you anything to suggest in the way of addition or alteration in the Mines Inspection Act?—I have not, but there are two or three things about which if the Committee have not made up their mind, I would give an opinion; as to sub-inspectors for instance, and as to weighing and measuring.

14347. What is your opinion about sub-inspectors?—I hope I never shall have one; I think they would make work for me, and I have already quite as much as I can do.

14348. Have you had opportunities of comparing weighing with measuring?—As regards 19-20ths of my district it is totally impracticable to legislate upon weighing; it is quite out of the question.

14349. Mr. *Fawcett.*] They must measure, you mean?—The men do not work by weight at all, nor by measure, of the coals raised.

14350. *Chairman.*] Would there be any difficulty in requiring that they should work or be paid by weight?—It would be impracticable.

14351. Why would it be impracticable?—Because the men go down the pit, and are measured perhaps in one mine five yards of holeing to do, in the next mine three yards, and in another four yards; it all differs according to the work they have to do.

14352. They are paid by yardage?—Yes.

14353. Is not the coal hewn also weighed at the pit's mouth?—It is weighed to the charter master or the butty, and he has the weighing of it himself; the men have nothing to do with it.

14354. The charter master is paid by weight, but the working collier is paid by yardage?—Yes, in two of the three counties.

14355. Do you think that it would be desirable to give the inspector a greater power of reporting upon the defective management of a colliery without pointing out any specific defects mentioned in the Act?—No, not further than we go; I think it is a very heavy responsibility for a coal owner

owner to incur, for us to give him notice that he is held responsible for anything that may happen, which I would avoid doing if possible.

14356. Do you conceive that it is part of the duty of the inspector to report to the owner that his manager is an incompetent man, for instance?—No; but if the state of the pit has been represented to the manager, and he does not seem to have the knowledge how to alter it, then I think it is the duty of the inspector to let the proprietor know the danger he is incurring.

14357. Have you ever reported to an owner that his manager was an incompetent man?—I do not think I can go that far; I may report to him that the management is very defective.

14358. Have you ever reported to him in that way, without specifying some of the defects mentioned in the Act?—I can read a letter, if the Committee wish, which will illustrate my practice.

14359. Will you read the letter without telling us to whom it is written, merely for the purpose of letting us know what is your notion of the duties of an inspector?—"I think it my duty to call your attention, as the responsible manager of the colliery, to the unsatisfactory state of the ventilation in the pit. According to the returns of your own underlooker, there does not appear to be more than 37,000 cubic feet of air per minute passing through the whole of the workings, which is not much more than half that which is required for the health of the men and the safety of the mine. I found several places in the pit in a very unsatisfactory state, and the colliery generally clearly shows the want of that supervision which a superior colliery viewer can alone impart to it. I shall be glad to have an acknowledgment for this letter, as I think it but right that the responsibility should rest with you, and not with me."

14360. What answer did you get to that; in other words, what is the result of such a letter as that?—The answer I got was this: "I beg to acknowledge the receipt of your letter, and in reply shall endeavour to improve the ventilation of our pit as you suggest; I think an impartial inquiry should be made as to whom the merit is due to of the complete absence of explosion in our pit for the last 20 or 30 years." Then follow some small matters, which I need not read; that is all the answer I got to that letter.

14361. Have you visited the mine since that correspondence?—I had been down the day when I wrote that letter; I had been down twice that week.

14362. Have you been down since then?—No, I have not; I wrote again on the 30th of June, "It is not for me to go into an inquiry as to which of your many managers during the last 20 years the merit is due to of preventing explosions in your colliery; but it is my duty to point out to you as the responsible manager of the colliery, that after careful inspections of your pit on the 22d and 29th of June, I am of opinion that the ventilation in such pit is totally inadequate to the requirements of such mine, and tends to endanger the health and the lives of persons working therein. If you desire it, I shall at all times feel a pleasure in conferring with you as to the proper course for you to pursue."

14363. Before you wrote the first letter, how long an interval had there been before you visited that mine?—I should think eight or nine months.

14364. What was the state of the mine when you visited it at that time?—It was not satisfactory then.

14365. Did you call the attention of the manager then to it?—I did; but he was about leaving the colliery, and I could get nothing satisfactory from him, except that he was no longer responsible.

14366. Now there is a change of management, is there?—There is no manager now; it is the proprietor that has the management.

14367. But the proprietor is manager himself, is not he?—Yes; but he never goes down the pit, and is not a mining engineer.

14368. Then, you would quote that as an instance in which the interference of the inspector had not been able to produce any improvement?—I am afraid it will not.

14369. Do you think that more frequent visits might have induced the owner to improve his mine?—No, I think not; I think there is an idea that men of this class are better suited for the purpose than more able managers.

14370. But I thought you said there was no manager?—The underlooker acts as one.

14371. This is a mine which is managed by an underlooker, in fact?—Yes.

14372. Mr. *Liddell.*] I understand, from the close of that correspondence which has been read by you, that a distinct promise has been made to do what the owner can to improve the ventilation in accordance with your suggestion?—Yes.

14373. That is the gist of his answer?—Yes, that is the gist of it.

14374. I presume you will not permit any length of time to elapse before again visiting the mine to see whether that promise has been fulfilled?—No; I gave that as one of those instances where we apprehend danger, and keep our eye upon the particular mine.

14375. That will then be for you to decide; if the promise has been kept, and you observe a marked improvement in the ventilation, you will be so far satisfied?—Yes.

14376. If you find that nothing has been done then, as I understand, it would be your paramount duty to exercise all the powers you possess under the Act to compel that improved management which you think so desirable?—That is the course I shall pursue.

14377. Mr. *Fawcett.*] Has it not become, now, customary, if men are killed by an accident from explosion, for widows or representatives to bring an action for damages against the proprietor of the mine?—I think the law does not allow that.

14378. We have had it in evidence that it does, I think?—I fear that that was not correct; I believe that Lord Campbell's Act does not apply where it is the Act of one servant that causes the death of another.

14379. That is not the point I wish to put. I will suppose it to be proved that the death or explosion clearly arose from mismanagement on the part of the proprietor of the mine, or of his representative, which management led to the death of the men; then his friends could bring an action for damages, I presume?—But, as far as my experience goes, neither judge, counsel, nor jury understand the question, and you cannot convince them there has been negligence.

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14380. Have you never known of such an action being brought?—I have known of one, but it was compromised; and I have read of several, but they have not succeeded.

14381. If the representatives of men who were killed by accident were easily able to bring an action against the proprietor of the mine, or the manager of the mine, and recover heavy damages in the case of that accident, arising from culpable neglect on the part of the proprietor or manager, would not that very much tend to prevent accidents?—No doubt; but I think it should be applied to all other trades, if it were applied to mining.

14382. Do you think that any alteration of the law such as that would be desirable?—I may say that I attribute one half of the safety of life in mines in Scotland to the prompt action of the Procurator Fiscal.

14383. Do you think that if a similar law existed in England, it would very much tend to prevent accidents?—If it were applied to all trades and manufactures, there is no doubt it would; it would not be fair to apply it to mines only.

14384. Mr. *Liddell.*] You said just now, unless I misunderstood you, that neither judge, counsel, or jury understand the question?—They do not seem to understand it.

14385. What question?—A mining question when it comes before them as to the cause of death; cases of manslaughter rarely succeed at assizes.

14386. You do not, I imagine, recommend a special court of law for trying mining questions, or how would you get over that difficulty?—No, I should recommend, if my recommendations were taken for anything, that there should be a medium course for the coroner's jury between accidental death and manslaughter. If they had the power to give up to a certain amount, say 40*l.* or 50*l.*, with a power of appeal against that fine, I think that would have a very good effect. The jury have no power now except to go against their own conscience, and say it is an accident when they know it is not.

14387. No jury has any power, as we all understand, of doing anything but forming an opinion upon facts?—Just so.

14388. But do you propose that the jury should have the power of assigning or inflicting penalties?—Under the direction of the coroner, subject to an appeal to the Court of Queen's Bench, or elsewhere.

14389. Then the coroner's court would cease to be a court of inquiry, and would become a species of civil court, would it not?—It would.

14390. Have you considered the question whether that would work well?—I think it would work well, and would have a very good effect.

14391. *Chairman.*] You think, at any rate, that many accidents happen for which, under the present law, there is no adequate remedy?—I do.

14392. And for which compensation ought to be given in some way or other, but which compensation is not now obtained?—Yes.

14393. Mr. *Fawcett.*] If that suggestion of yours were adopted for facilitating the recovery of compensation, I presume that your power would be very much increased as an inspector, because, if you gave evidence to the jury of mismanagement in any particular mine, that would produce a great effect upon the jury in determining the question of compensation?—It is very rarely that I do give evidence at all.

14394. Take, as an example, the case of the recent explosion; supposing that the representatives of the men were going to bring an action for damages against the proprietor of the mine, if you were called, and your evidence went to show that the mine had been managed badly, would not that evidence naturally produce a great effect upon the jury?—I think there would be other evidence as well as mine.

14395. Yours would, however, would it not?—I have no doubt it would.

14396. That being the case, of course, a colliery proprietor would be anxious to avoid the possibility of that evidence being given, and therefore he would be more likely to attend to your suggestions, would he not?—It might act in that way; but I certainly should not wish that the inspectors should have any more power than they have now.

14397. It would not be giving him more power?—It would be more influence.

14398. If you report now to a proprietor that his mine is managed badly, and he does not attend to your recommendations, he does not lose much by it; but if you reported to him that the mine was managed badly, and the proprietor felt that that evidence might be repeated in a court of justice when an action was brought against him to recover damage, of course he would be anxious to avoid giving you an opportunity of giving that evidence?—But it must not be inferred that a coal proprietor does not lose anything by an accident; the loss to him is enormous where there is an explosion; he is the heaviest sufferer.

14399. *Chairman.*] In money, you mean?—Yes, in money.

14400. Mr. *Liddell.*] You said just now that one of the difficulties was that neither counsel, judge, nor jury understood these mining questions, but yet I understand you to to say that you thought it desirable that the jury should have the power of assigning damages. If you gave them that power, would it not be necessary to alter the constitution of the jury so as to insure that the jury should understand the question?—It would be necessary to get a very good jury at all times, which is not always the case now.

14401. Do you think that the jury as at present composed are men to whom you could entrust that power?—Unless in the case of serious accidents, there is not that care bestowed now which there would be under those circumstances.

14402. What is your view (we have gone a good deal into this question) as to the best way of altering the constitution of the jury with a view to its improvement; what class of men would you like to see upon it?—An educated class of men.

14403. The present class of jurymen are chiefly shopkeepers, are they not?—Chiefly below that.

14404. You would form something like a special jury?—Yes, a jury of better standing.

14405. Special juries to go through each particular case, I suppose?—It would not be known in each case whether neglect would be proved or not. Now they infer that there will be no important consequences attending the verdict of the jury, and therefore it does not matter so much who is on the jury.

14406. Should

14406. Should you like to see working men, practical miners, put upon the jury?—As far as my experience goes, they make the very worst jurymen, thinking inquiry needless.

14407. Are they prejudiced? — Very much indeed, and generally against investigation.

14408. And therefore it is, I suppose, that you say they make the worst jurymen?—Yes.

14409. Mr. *Greenall.*] Were you required to give evidence before the jury in this last accident?—I was.

14410. But that is what you do not like to do, and what you decline to do when you can?—Yes, I decline if I possibly can.

14411. What was the constitution of that jury? —It was a very good one.

14412. Mr. *Fawcett.*] Of what class was it composed?—Men from respectable manufactories, and men who had been formerly viewers; one or two of them had been coal proprietors.

14413. Were there any working men on the jury? —There were one or two working men upon it.

14414. Mr. *Greenall.*] But I understand you to say that the jury, as compared with the general juries, was in your judgment a superior one?—Very, and the police always take care to summon a good jury if it is a serious accident. They make a point of that. *T. Wynne, Esq.* 19 July 1866.

14415. You mean there was a little more pains than usual taken in getting intelligent men to form the jury?—Yes.

14416. Mr. *Liddell.*] I understand you to say that you would like special jurymen to be summoned?—Intelligent men.

14417. Mr. *Greenall.*] Just now I understood you to indicate an opinion that you would commit to the jurymen a power of imposing a penalty? —Yes.

14418. You would limit that penalty in amount, I presume?—I would, and there should be a power of appeal.

14419. What limit would you put?—I would not go beyond 50 *l.*

14420. Mr. *Liddell.*] Not even in the case of death?—No.

JAMES PHILIP BAKER, Esq., called in; and Examined.

14421. *Chairman.*] OF what district are you Mine Inspector?—South Staffordshire and Worcestershire. *J. P. Baker, Esq.*

14422. How long have you been so?—Nearly six years. I have also been acquainted with mines and mining for more than 30 years, and during that period I have had considerable experience in them as colliery viewer or manager, and also as lessee.

14423. Do you think that you are equal to the duty of inspecting that district?—I do, to the extent, I think, the Act requires it.

14424. You do not think that for the inspection, as it is contemplated by the Act, any more inspectors are required?—I do not.

14425. Do you think that it would be desirable to extend the duties of inspectors?—It would entirely depend upon the question how far inspection ought to reach, whether it ought to be a periodical inspection of every pit, or whether it should be a different kind of inspection.

14426. Do you think that a more frequent inspection would tend to prevent accidents?—I hardly think it would in the majority of cases, for I am rather inclined to believe that the more frequent the inspection the more lax would the managers and those in charge of the underground workings become in their discipline, and that rather than remedy any evil or defect which existed, they would be inclined to wait the arrival of the inspector, and bide it out, and thus further endanger the lives of the workmen.

14427. But the inspection must become very frequent, indeed, before it can go far enough to discharge the owners from responsibility, must it not; if, for instance, an inspector went into every mine in his district once in six months, do you think that that would discharge the managers from the sense of responsibility?—I think it would tend that way. If the owner knew that the inspector was coming on a certain day, or at the end of six months, I have no doubt he would be better prepared for him then than during the interval.

14428. I am not suggesting that the inspection should be at stated intervals, but do not you think that inspection might be made more frequent, without being so frequent as to lessen the sense of responsibility in the case of managers? —It might, to some extent, but I fear it would not be so generally.

14429. Do you think that the visits of inspectors habitually produce any improvements in the management of mines?—Yes, I have little doubt they have done so; in fact, I am sure they have.

14430. Whenever you visit a mine that is not well managed, some improvement in that mine follows in consequence of your observation of the mine, does it not?—Yes; if it is necessary to carry out any improvement.

14431. If you went oftener, I suppose more improvements would be made?—If necessary, I have no doubt they would.

14432. How many collieries have you in your district?—About 540.

14433. How many do you visit in the course of a year?—I may have visited more or less, either above ground or below ground, perhaps the majority of those collieries; say 300, or perhaps more.

14434. How long have you been inspector?—Nearly six years.

14435. Is there any colliery in your district that you have never visited?—I do not think there is any colliery of any duration which I have not inspected either above or below ground.

14436. What is your rule for visiting collieries; do you wait for an accident or a complaint, or do you go without any special reason?—I go without any special reason; my practice is to go to a colliery when I have leisure, and to inspect it either above or below ground.

14437. What do you mean by inspecting above ground?—The winding machinery, colliery plant, &c., which is a very important matter in my district.

14438. Are accidents from the breaking of chains frequent in your district?—No, not now.

14439. Were they frequent before you went there?—They were much more frequent formerly than they now are.

14440. Do you think that your visits above ground have tended to diminish those accidents? —I think so.

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14441. Have you noticed the chains used in the winding machinery of collieries?—I have, and I have had occasion to stop the working of winding machinery. In the case of some pit chains I have found two links broken out of a three link flat chain.

14442. Have you given your attention much to the chains by which the pits are worked?—I have.

14443. What is your opinion as to the splicing of chains?—The splicing of chains is a safe operation, if done properly.

14444. What is your opinion as to the plan of mending ropes by clasps?—I have not one in my district, I think, of the character to which you refer; I do not approve of them.

14445. Have you anything to suggest as to the operation of the Act?—I should like to explain how the Act has worked during the time for which it has been in operation. About the year 1850 the loss of life in coal mines alone in my district was about 200 per annum. For the first 10 years, that is to say, to 1860 inclusive, the annual average was 162½. The annual average of the last five years to 1865 inclusive was about 113½.

14446. Mr. *Fawcett.*] The number having been reduced about 50 a year?—Yes.

14447. *Chairman.*] I presume we shall find those figures in your report?—Yes, in my report for the last year; I should say that the number of lives lost in my district last year was 91; that report has not been published yet.

14448. During that time there has been a considerable increase in the quantity of coal got up I suppose?—There has; there never was a time I believe in my district when so much coal was raised as there is now, nor when so many persons were employed.

14449. To what do you attribute that decrease of accidents which you have just pointed out?—To better arrangements both above and below ground, and to the inspection, to some extent. I do not give the inspection all the credit, but I believe that it has had a good deal to do with the result. I think that both owners and managers of collieries, and also the charter-masters, are more careful now than they used to be, and take more pains.

14450. You think that that has been the case since the Inspection Act?—I think so.

14451. Mr. *Liddell.*] Has the action of the Double Shaft Act tended in some degree to bring about that better state of things, do you suppose?—Not at all, I think we have not lost more than one life in 15 years by any shaft collapsing.

14452. Mr. *Fawcett.*] You said that you thought you had visited all the mines in your district either above or below ground?—Yes.

14453. What proportion of the mines in your district should you think you have never been underground in; should you think that you have been underground in half of them?—No, I should not.

14454. Then you really know nothing, of your own knowledge, of the management of those mines?—In the case of many of them I know nothing from actual observation.

14455. You say that, in the case of half the mines of your district, you have not been underground in them; therefore I say that, as to those mines, you can know nothing about them from your own personal observation?—Just so; that proportion of half is merely a guess at the moment.

14456. It is quite possible, is it not, that if there had been two inspectors in your district instead of one (of course I know that you have been very assiduous), all the mines would have been examined underground as well as above ground, and in that way the inspector would have known the management of all the mines from personal observation?—I should wish to be better understood. In some collieries we have a large number of pits. What I meant to say was, that I had not been down one half the pit shafts to inspect a particular portion of the mine. In some collieries that do not comprise more than 104 acres there have been as many as 50 pit shafts, and in many cases several pits are at work in the same coal seam.

14457. Assuming, as we will assume, that you have been very assiduous yourself, and taking the fact that you have been down half the pits in your district, does it not follow that if there had been two inspectors, all the pits would have been examined if the other inspector worked as hard as you have done?—I do not believe they would; I do not believe that the two inspectors would have been able to descend all the pit shafts in my district.

14458. But you say that you have been down half of them?—I did not mean down half the number of the pits, but half the collieries; and that is merely a guess.

14459. We will not fix any arithmetical proportion, but I understand you to say that a very considerable number of the collieries you have never been underground in?—A considerable number of them, but I do not know how many of them.

14460. If there had been two inspectors that number would have been very much diminished?—Perhaps I should hardly call it a considerable number of the collieries.

14461. I am not putting the question in the least degree as a censure upon you, I am simply wanting to find out to what extent the collieries have been inspected. I assume that you have done as much as you possibly can, as I have every reason to know that you have; I will ask you, putting it in the vaguest possible terms, whether it is not the fact that, in regard to a considerable number of the collieries, you have not been able to go underground and see their workings?—That is so.

14462. If there had been another inspector, who could have taken a portion of your district from you, that number of collieries which have not been visited underground would necessarily have been diminished, would it not?—It would.

14463. Therefore, if that had been the case, would not the state of the collieries in your district have been better known than it now is?—They might have become better known, perhaps; but it is a question whether the majority of them would have been any better managed.

14464. Why do you think that, although they might have been better known, they might not have been better managed, bearing in mind your previous remark that, owing to your inspection, great improvement has ensued in the mines?—That is to say, in many of them, probably, no improvement is really needed.

14465. Why do you not suppose these other collieries would have been better managed, if

if better known, considering that in the case of many of those collieries that are better known the management has improved within the last few years?—I have no doubt that, if there were more frequent inspection in collieries where they needed improvement, that improvement would be made.

14466. Then, you think, on the whole, that if the collieries in your district were more frequently inspected, they would be better managed?—I think they would in those cases where defects are really existing.

14467. Mr. *Liddell.*] You know pretty well by the character of the owners and the persons they employ, whether a colliery is likely to be well managed or ill-managed, do not you?—Yes, you can generally judge if you know the men.

14468. And, I presume, you do not think it necessary to inspect well-managed collieries to the same extent that you inspect less well-managed collieries?—I do not think it is desirable to do so, supposing I were fully convinced that they were well managed; but I should not base my opinion entirely upon the management.

14469. Supposing that you go down a colliery this year, and that you find everything admirably well managed, and you know that the same manager remains there, and the colliery remains in the same hands, you might let three or four years elapse before you visited it again, I suppose, unless something occurred to attract your particular notice to it?—That might be the case.

14470. Is not that often the case?—That is not my practice.

14471. Do you mean that whether a colliery is ill managed or well managed, you make a practice of periodically visiting it?—No, I go and inspect all the collieries in my power, when I have any leisure, and when there is any need for doing it; I should not refrain from going down any particular pit, however well the manager might be up to his duties, if I were in the district and had leisure.

14472. But if there is a particular colliery, of which you consider the management defective, you continue to visit that colliery until you get things put straight, do you not?—Yes, and in most cases I give notice in writing to the owner or agent, as required by the 17th section of the Inspection Act.

14473. That you consider to be part of your duty?—I do.

14474. And never to let the owners or managers alone until they have carried some improved system into operation?—Certainly not, if improvement is necessary.

14475. Supposing that from some cause or other there is a change of management, and that circumstances have occurred to prevent your paying that special attention to a particular pit into which some bad management has crept meanwhile, is it not almost certain that you will get an inkling from some source or other of the change for the worse which has taken place in that colliery?—I think I should.

14476. It is perfectly open to any workman to send you an anonymous letter complaining of anything which has taken place, or of the state of the colliery, is it not?—Yes.

14477. Do you often receive those letters?—I do, occasionally.

14478. Do you always pay attention to them?—I do; I either go at once or write to the owner, if I cannot go.

14479. Do you tell the owner the source from which you have obtained the information?—I never tell him; I should never think of doing that.

14480. You merely say "such and such a circumstance has come to my knowledge, and I request that the thing may be put right"?—Yes, if my informant is correct in the information which he has given me, I never let it be known who has given me the information.

14481. Does not that, in your opinion, constitute a very valuable, if not the most valuable part of an inspector's position, that power which the men have of addressing to him anonymous complaints to which he attends immediately, and to which he directs the attention of the owner?—I think that is a very important part. I do not like anonymous letters myself, but I always attend to them; I have had many fruitless journies, and travelled many miles needlessly in consequence of them.

14482. Still that does not prevent you from paying attention to them when you have them?—No.

14483. Is it your opinion that all collieries ought to be under the management of educated mining engineers or viewers?—Yes, all important collieries, but collieries vary; there are some few collieries working two or more pits called a colliery, where really there is no extent of workings, and very often the owner himself takes the whole of the responsibility, and there is no manager at all. Some of the owners in my district are men who have risen up from the ranks of the working miners. Having saved a few pounds, some more, and some less, they often engage with the original owner to work out the remnants and pillars of coal left in the old collieries, which are in some cases wrought with a windlass, horse gin, or steam engine.

14484. Are those men whom you describe as having risen from the ranks, and who have no scientific education, but have a good practical knowledge of the general working, competent in your opinion to manage collieries?—Not competent to manage large collieries, but I may say that the loss of life does not take place in some of these little collieries in my district, which are under such men, to the same extent as in some of the larger collieries.

14485. I presume they are shallow pits, mostly?—Some are, and some are deep.

14486. Are they liable to explosion; is there much fire-damp in them?—My district may be termed a non-fiery one; nevertheless we have some explosions.

14487. The choke damp is the great difficulty with which you have to contend, I suppose?—We have a great deal of carbonic acid gas, called choke or black damp, at times, in some of the old mines, especially when the wind is one direction, south-west, and the men are sometimes driven out of the mine altogether in consequence.

14488. In regard to having an educated viewer, does not the position of an educated viewer enable him to enforce better discipline amongst the men under his charge than another man could enforce?—Yes.

14489. The men have a greater respect for him, I suppose?—I believe they have; in fact, I am sure of it.

14490. And it is in that sense that he is able to enforce a better state of discipline?—Yes,

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he is able to understand the special rules, and also the Inspection Act.

14491. And the men have natural acuteness enough to discern a superior man from an inferior man, have they not?—I am afraid not, in point of education, in many cases, for we occasionally find the overseers of the pits quite as ignorant as the working men. They are good men for all practical purposes in the mine, but as for education, some of them are very ignorant indeed.

14492. Do you think that that class of man to whom you have just referred is a fit man to entrust with the management and discipline of a pit?—Not in important collieries; certainly not.

14493. Mr. *Greenall.*] You spoke of a very favourable change in respect of the falling off in the number of deaths; has that decrease been occasioned by the use of better machinery; were the majority of deaths, in fact, from explosions, or from other causes?—The great source of loss of life in my district has been falls of roof and coal in the mine, and shaft accidents; the falls have greatly diminished; the shaft accidents have not diminished in the same proportion, nor have the explosions; the latter average, I think, about eight or nine per annum, but there is a great diminution in the loss of life through falls; that has been what I may term the crying evil of the district in working the ten-yard and other thick coal seams.

14494. It is always a great satisfaction to you, I suppose, to find a good manager when you go to a colliery?—It is a very great pleasure to find a good manager.

14495. Is it not the most foolish economy that can be practised by the owner of a colliery to employ an inferior manager?—It is; but the owners say, on the other hand, "We get the best men we can employ, under the circumstances."

14496. *Chairman.*] Do you think that it would be any great hardship upon the inspectors if they were required to enter in their reports the number of visits they had made and the number of mines they had left unvisited?—I think that would cause invidious comparisons between the inspectors, and I do not think it would do.

14497. The inspectors of education make such returns of the schools which they visit, do not they?—If it was a question as to the number of pits and collieries visited, perhaps a pit in the north of England would be more extensive than a dozen of some of the pits in my own district, that is to say, I might be able to visit a dozen while an inspector in the north of England could only visit one, so that it would be an invidious comparison to bring forward before the public if the numbers were given in that way.

14498. And would mislead them, you think?—I think so.

14499. Mr. *Fawcett.*] It is part of your duty to see that the educational provisions of the Act are attended to, is it not?—It is.

14500. Do you think that it requires more inspection to look after the compliance with that portion of the Act?—I do not think it does, for the boys as a rule in my district are not allowed to work under the age of 12 unless they can read and write; when the law first came into operation many boys were dismissed from the mines, and I regret to feel it my duty to say that there was no useful advantage taken of those clauses in the Act by the persons to whom I allude; it is virtually a dead letter.

14501. The boys were sent out to other industries, you mean?—In my district there is a large demand for juvenile labour for other trades; and as long as that is the case, the effect of keeping the boys out of the mines until they have attained a certain age, say of 12 years, will, I fear, tend to keep them away from the mines altogether.

14502. You think that the Act has done very little good in that respect?—Very little indeed; I am sorry to say that both in the pits and on the surface there is no appreciable amount of good done by it, at present.

14503. Therefore, your experience would lead you to say, as I understand you, that if you have an Act of that kind, it ought not to be confined to one industry, but to be extended to others?—It ought to be general, I think. Legislation on the subject to be effectual, must, in my opinion, be of universal application.

14504. Mr. *Liddell.*] I am going to ask you a question, which you can answer, or not, as you think fit; but I should be glad if you would answer it. Have you observed in your district an unfortunate tendency on the part of owners and proprietors of mines to employ inefficient men as their viewers?—I do not think I have; I do not think for a moment that there is any disposition in the trade, generally speaking, to employ inefficient men; that would be most detrimental to their own interests.

14505. I will modify my question in this way; are there certain establishments with which you are acquainted, where you would like to see a more experienced person placed in charge than the person now in charge?—I may have seen an instance or two of that kind, but I do not think it is general; I do not think for a moment that the trade have any desire in that direction.

14506. Then, you are satisfied, as I understand you, on the whole, with the class of persons entrusted with the management of mines in your district?—I am not quite satisfied with them, but I do not think that the owners have a desire to appoint inferior men.

14507. Then, why are you not satisfied on the whole with the men who are in those positions?—Because I do not find them all of equal ability, which I should like to do.

14508. Has any mode occurred to your mind, by which the services of competent persons could be secured more effectually than is the case at present?—It would be a work of time to bring about in my district.

14509. Do you mean that in your district the class of skilled viewers whom you would like to see employed, are not actually to be found in all cases?—They are not.

14510. So that, if there is a lack of skill, it is owing to a lack of supply?—No doubt of it, in a very great degree.

14511. And it is not the fault of the owners, but it results from their actual inability to obtain the class of men you would like to see in those positions?—I have no doubt that that is so in many cases, but it could hardly be expected that they should call in one of the most experienced viewers at the greatest cost to attend to, we will say, one particular pit of very small dimensions. You may have a man who is not quite up to the superior colliery viewer, but yet is quite competent to manage a small colliery. It all depends upon

upon the circumstances: if you have got a difficult mine, or a fiery mine, to deal with, it requires a man of great ability to grapple with it, but in working a mine of another class, where it really does not require such ability, and where those dangers are not present, a man of less ability would be able, certainly, to carry it out with advantage to the owner and with credit to himself.

14512. Have you ever taken the trouble to analyse the accidents, and do you find that the proportion of accidents which occur in the small collieries which are in the hands of less wealthy men, which are doing a less amount of business, and which are carried on at a cheaper rate altogether, is larger than the proportion of accidents that occur in the larger, and, consequently, better managed collieries?—No; I believe they are less in number.

14513. *Chairman.*] Do you mean less in proportion to the coal got?—I believe they are less in number and in degree.

14514. Do you mean less in number in proportion to the men employed?—I understood the honourable Member's question to be whether or not there were less accidents in the inferior collieries than there were in the superior collieries, and I say, I believe they are less numerous in the inferior, but I am not prepared to say what the figures are.

14515. But do you mean less in proportion?—In point of number.

14516. They may be less in the whole number, but are they less in proportion to the quantity of coal raised?—Yes, in some cases, but certainly not as a rule.

14517. Then you think, upon the whole, the average of safety is greater in small mines than in large mines?—I believe it is so in my district; I believe that the results have shown it to be so in late years.

14518. Are the small mines as deep as the large mines?—Not as a rule.

14519. Mr. *Fawcett.*] And that is the reason, is it not, why there are fewer accidents in them?—I should hardly assign it to that cause. In a large colliery you have many things to depend upon which require vigilance and great care, but where you have a small extent of mine in operation, that amount of care is hardly requisite because there is not the chance of having an accident to the same extent as in a larger mine.

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APPENDIX.

Appendix, No. 1.

PETITION of Her Majesty's Justices of the Peace in and for the County of Flint.

App. No. 1.

The humble Petition of Her Majesty's Justices of the Peace in and for the county of Flint, assembled at Quarter Sessions at Mold, in the said county, on Wednesday the 4th day of January 1865,

Sheweth,

That the attention of this court has been directed to the Report presented to both Houses of Parliament during the last Session, of the Commissioners appointed to inquire into the condition of all Mines in Great Britain, to which the provisions of the Act made and passed in the 23d and 24th years of the reign of Her present Majesty, Queen Victoria, intituled "An Act for the Regulation and Inspection of Mines," do not apply, with reference to the health and safety of persons employed in such mines.

That, in the opinion of this court, it is desirable that the recommendations of the said Commissioners should be adopted, but more especially the portions thereof relating to abandoned shafts and old workings unprotected at the surface.

Your petitioners, therefore, humbly pray that your Honourable House will take the necessary steps during the present Session for incorporating such recommendations in an Act of Parliament.

And your petitioners will every pray.

J. Scott Bankes, Chairman
of the Court of Quarter Sessions.

PETITION of the Under-Miners of Northumberland and Durham.

The humble Petition of the Under-Miners of Northumberland and Durham,

Sheweth,

That on account of the want of a uniform system of weighing miners' material at the pit banks of the mines and collieries of this country, your petitioners are subjected to great hardships from the impossibility of the true quantity or value of their labour being known to them.

That your petitioners and their families are seriously inconvenienced, and suffer great loss on account of the length of time their wages are withheld by the proprietors of mines and collieries, thus making them dependent on truck shops for the supply of their family necessities.

That your petitioners are deeply impressed with the low social condition of miners, and believe that this mainly arises from a want of opportunity and means to educate their children, and the impossibility of making them an intelligent class of men, so long as colliers' boys descend the mine at 10 years of age.

That the fearful sacrifice of life in mines and collieries affords abundant proof that the legislative measures hitherto passed have proved to be totally inadequate for securing the personal safety of the miners of this country.

That the practice in the Staffordshire collieries of working the thick coal in more than one face, is highly dangerous, and very destructive to life in the said collieries.

That the loss of life in the ironstone and limestone mines of the United Kingdom affords ample evidence that legislative supervision should be extended to them.

That the practice of employing females on or about the pit banks of mines and collieries is degrading to the sex, leads to gross immorality, and stands as a foul blot on the civilisation and humanity of the kingdom.

That your petitioners believe that the sacrifice of life in mines and collieries can only be prevented by the appointment of a sufficient body of sub-inspectors, who* duty should be to examine, internally, the mines and collieries in which your petitioners are called upon to labour.

* *Sic in orig.*

That the constitution and practice of coroners' courts, so far as they relate to accidents in mines, are so objectionable that justice is not secured to your petitioners.

That accidents in mines are mainly caused by a want of skill in the agents, overmen, and chief managers of mines and collieries, and from lack of diligence or want of care on the part of the subordinate officers.

Your petitioners therefore humbly pray that your Honourable House will be pleased to pass a law making it compulsory for all coal to be paid for by weight only, and that true weighing machines be placed on every pit bank in the kingdom.

That a uniform system of paying wages weekly be made compulsory by Act of Parliament.

That boys be not permitted to enter mines till they are 12 years of age, and also that their working time be limited to eight hours per day to all under 14 years of age.

That your Honourable House will be pleased to put a clause in the Bill prohibiting the working of the thick coal in Staffordshire to one face only.

App. No. 1.

That in any future legislation affecting mines and collieries your Honourable House would be pleased to insert a clause extending the inspection system to all ironstone and limestone mines.

That your Honourable House would prohibit the employment of females on or about the pit banks of the mines and collieries of this country.

That a sufficient number of sub-inspectors be appointed to aid the present inspectors, so as to render inspection of mines efficient, or to act in such manner as your Honourable House may be pleased to direct.

That not less than one-half of the number of jurors who form the panels in coroners' courts shall be composed of operative miners.

That all agents, overmen, or chief managers of mines be subjected to a scientific examination, and that a certificate of competency be given by some qualified person, or Board of Examiners, as your Honourable House may be pleased to direct, previous to any mine being placed under their charge.

Finally, your petitioners humbly pray your Honourable House to pass a law to remedy the evils above complained of; or that a Committee of your Honourable House be appointed, or that your Honourable House would cause a Royal Commission to issue, for the purpose of inquiring into the state and condition of the collieries, as well as the ironstone and limestone mines of this country, and into the working of the laws relating thereto.

And your petitioners, as in duty bound, will ever pray.

William Elsdon.
John Dalglish.
William Turnbull.
&c. &c. &c

Appendix, No. 2.

PAPER put in by Mr. *Mullin*, as an Appendix to his Evidence, 22 March 1866. App. No. 2.

TABLE showing the WEIGHT and VALUE of each Description of MINERAL taken from the MINERS of the PATRICROFT COMPANY'S CANNEL MINE from 13 November 1862 up to 4 March 1866, not including Six Weeks the Brow Clerk was absent.

	Tubs.		*Tons*	*cwt.*		£.	*s.*	*d.*		£.	*s.*	*d.*
Cannel -	1,009	Weighing 6 cwt. each Tub -	302	14	Stopped from Miners 1 *s.* 6*d.* per tub -	75	13	6	Sold by the Company at 13 *s.* per ton -	196	15	1
Coal - -	2,855	Ditto - -	856	10	Stopped from Miners 8¼ *d.* per tub -	98	2	9¼	Sold by the Company at 8 *s.* per ton -	342	12	–
Slack - -	105	Ditto - -	31	10	Stopped from Miners 2 *d.* per tub -	–	17	6	Sold by the Company at 3 *s.* per ton -	4	14	6
Burgie -	2,687	Ditto - -	806	2	Stopped from Miners 4 *d.* per tub - -	44	15	8	Sold by the Company at 1 *s.* per tub -	134	7	–
TOTAL -	6,656	- - -	1,996	16	- - - -	219	9	5¾	- - - -	678	8	7

		Tons.	*Cwt.*
Taken for Short - - - -	1,599 Tubs, weighing	479	14
Ditto - Dirt - - -	3,802 „ „	1,140	12
Ditto - Slack - - - -	1,255 „ „	376	10
TOTAL - - - -	6,656	1,996	16

Appendix, No. 3.

PAPER handed in by Mr. *Alexander M'Donald*, 4 June 1866.

App. No. 3.

LIST of STORES held in *Scotland* by Colliery, Iron, and Mine Owners.

TRUCK SHOPS.	Number of Men.	—	Payments.
Slamanan District:			
1. J. Black, Meadowfield	65	Store	Fortnightly.
2. J. Watt, Arnloss	45	ditto	ditto.
Holytown District:			
1. Trustees of Monkland Company, Thankerton	200	ditto	Monthly.
2. Summerlee Company, Jerviston	150	ditto	ditto.
3. Robert Stewart, Omoa	500	ditto	ditto.
4. William Neilson & Company, Mossend	500	ditto	Fortnightly.*
5. Trustees of Monkland Company, Legbrannock	250	ditto	Monthly.
6. Ditto „ Chapelhall	250	ditto	ditto
7. James Merry, Woodhall	150	ditto	Fortnightly.
8. W. S. Dixon, Carfin and Cleland	300	ditto	ditto.
9. A. G. Simpson, Carfin	100	ditto	ditto.
Wishaw District:			
1. J. Watson, Parkhead	200	ditto	ditto.
2. Ditto, Old Pit	30	ditto	ditto.
3. J. Anderson, Ravenscraig	35	ditto	ditto.
4. J. Kerr, Kerr's Pit	50	ditto	ditto.
5. R. Bell, Bell's Pit	85	ditto	ditto.
6. Wishaw Iron Company, Shieldmuir	50	ditto	ditto.
7. A Russell, Sunnyside and Clydesdale	200	ditto	ditto.
8. Summerlee Company, Shieldsmuir	100	ditto	Monthly.
9. A. G. Simpson, Pather	60	ditto	ditto.
Baillieston District:			
1. Reid & Stewart, Nackerton	200	ditto	Fortnightly.
2. J. Panton, Garthamlock	100	ditto	ditto.
3. Reid & Stewart, Provanhall	40	ditto	ditto.
4. M'Kenzie & Co., Springhill	100	ditto	ditto.
Glasgow District:			
1. Kidston's, Newton	70	ditto	ditto.
2. Buchanan, Gartochar	100	ditto	ditto.
3. A. L. Dixon, Govan	800	ditto	ditto.
4. Roxburgh's, Carmyle	55	ditto	ditto.
Districts of Lesmahagow, Lark Hall, Newmains, Shotts, and Crofthead:			
1. Shotts Iron Company, Morningside	100	ditto	Monthly.
2. Wm. Aitken, Chapel	100	ditto	Fortnightly.
3. D. Binnie, Morningside	50	ditto	ditto.
4. Shotts Iron Company, Shotts	600	ditto	Monthly.
5. Houldsworth, Coltness, Crofthead	560	ditto	ditto
6. Ditto - ditto - Newmains	700	ditto	ditto.
7. Mr. Swan, Riggside	35	ditto	Fortnightly.
8. Monkland Company, Brocklaw	125	ditto	Monthly.
Districts of Johnstone and Paisley:			
1. Merry & Cunningham, Balaclava	170	ditto	Monthly.
2. Ditto - ditto - Inkerman	900	ditto	ditto.

* Compelled to pay fortnightly by a strike.

App. No. 3.

TRUCK SHOPS.	Number of Men.	——	Payments.
District of Govan:			
1. Messrs. Cooks, Victoria	60	Store	Fortnightly
Mary-hill and Jordan-hill:			
1. Summerlee & Co., Keppoch	100	ditto	ditto.
2. Ditto - Blackhill	50	ditto	ditto.
3. Ditto - Kenmure	45	ditto	ditto.
4. Ditto - Knightswood	200	ditto	ditto.
5. James Merry & Co., Garscadden	550	ditto	Monthly.
County of Ayr:			
1. Merry & Cunningham, Den	600	ditto	ditto.
2. Ditto - Glengarnock	250	ditto	ditto.
3. Ditto - Kilbirnie and Hagsthorne	350	ditto	ditto.
4. Ditto - Reddins, Dabry	400	ditto	ditto.
5. Ditto - Stevenston	500	ditto	ditto.
6. Ditto - Warwickhill	180	ditto	Fortnightly.
7. Ditto - Annick Lodge, and Overeton	150	ditto	ditto.
8. J. T. Gordon, Annbank, Peelshill, and Ayr	450	ditto	Weekly.
9. Walker, Common	40	ditto	Fortnightly.
10. Houldsworth, Dalmellington	800	ditto	Weekly.
11. J. Barr, Doura	40	ditto	Fortnightly.
Districts of Falkirk, Armadale, Bathgate, Kinniel, and Carron:			
1. Grangemouth Coal Company, Grangemouth	220	ditto	ditto.
2. Wilson's Trustees, Kinneill	800	ditto	Monthly.
3. Shotts Iron Co., Palkemmott	600	ditto	ditto.
4. Monkland Steel Company, Armadale	400	ditto	ditto.
5. Ditto - Colinshields	200	ditto	ditto.
District of Coatbridge:			
1. Merry & Cunningham, Carnbroe and Coathill	500	ditto	ditto.
2. Wilson's Trustees, Dundyvant and Drumpeller	1,000	ditto	ditto.
3. Wilson & Co., Summerlee	600	ditto	ditto.
4. W. S. Dixon, Calder	450	ditto	Fortnightly.
5. Addie, Langloan	200	ditto	ditto.
6. Henderson & Co., Drumpeller	100	ditto	ditto.
Fifeshire:			
1. Iron Company, Lochgally	500	ditto	Monthly.
2. Forth Iron Work	600	ditto	ditto.
3. Colliery, Wellwood	250	ditto	Fortnightly.
4. Colliery, Lassodie	150	ditto	ditto.
Airdrie District, Lanarkshire:			
Stand Rigg, and While Rigg Collieries, Messrs. Black	300	ditto	ditto.
Plains Works of Blaco and others, Summerlee	200	ditto	ditto.
Drumshangie Collieries	100	ditto	ditto.
Greengairs Collieries	80	ditto	ditto.

SUMMARY OF TRUCK.

	Number of Men.
Slamanan	110
Holytown	2,400
Wishaw	810
Baillieston	440
Glasgow	1,025
Lesmahagow, &c.	2,270
Johnstone and Paisley	1,070
Govan	60
Mary-hill and Jordan-hill	945
Ayrshire	3,760
Falkirk, &c.	2,220
Coatbridge	2,850
Fifeshire	1,500
Airdrie District	680

App. No. 3.

POUNDAGES.

NOTES of Collieries where Poundage Money is exacted in *Scotland* for Advances of Cash.

	Number of Men.	Per £.	
		s. *d.*	
County of Ayr:			
1. Merry & Cunningham, Bonyton	250	1 –	Fortnightly
2. Kennet, Pyott Bog	25	– 10	- ditto
3. Do. Sea Bank	100	– 10	- ditto.
4. Black & Co., Bourtree-hill	150	– 6	- ditto.
5. Kennet, Springside	60	– 10	- ditto.
6. Walker, Old Rome	50	– 10	- ditto.
7. M'Night, Plan	40	1 –	- ditto.
8. J. & W Oliphant, Jerksland	40	1 –	- ditto.
9. J. Barr, Doura	40	1 –	- ditto.
Districts of Falkirk, Armadale, Bathgate, Kinniel, and Carron:			
1. Russell & Co., Redding	350	1 –	Fortnightly
2. Wingate, Craigend	30	1 –	- ditto.
3. G. & F. Watson, Bathvale	200	1 –	- ditto.
4. Omoa Iron Company, Baldardie	50	1 –	- ditto.

SUMMARY OF POUNDAGES.

	Number of Men.
Slamanan	385
Wishaw	635
Baillieston	190
Glasgow	1,390
Denny	530
Lesmahagow, &c.	1,040
Johnstone and Paisley	350
Govan	220
Mary-hill and Jordan-hill	626
Ayrshire	755
Falkirk, &c.	630

Appendix, No. 4.

PAPER handed in by Mr. *Ansell*, 14 June 1866.

Mr. George F. Ansell's Apparatus for Indicating the Presence and Amount of Fire-damp in Mines.

App. No. 4.

In speaking of fire-damp, I allude only to the carburetted hydrogen or marsh gas contained in the mixture, because that alone is the combustible substance, and this consideration is to be noticed because my figures will appear to be different to those obtained by some who have taken the compound substance, while I have taken only its combustible gas.

In the same manner, while speaking of "choke-damp," "after-damp," "black-damp," "dampie," &c., I allude only to the carbonic acid which is contained in the compound which passes under so many names, according to the source whence it occurs, for in all cases it is a mixture of carbonic acid, watery vapour, and nitrogen in varying proportions.

Fire-damp is a chemical substance, otherwise known by the name of mine-gas, or as marsh-gas, and is composed of one equivalent of carbon and two equivalents of hydrogen. It is a light substance of specific gravity 0·559, air being 1·000, and by its levity has a tendency to rise to the uppermost part of a chamber, notwithstanding the law of diffusion; but I have found that the lower strata contain less than the top strata in a chamber. It is combustible, forming carbonic acid and water.

Carbonic acid gas is a chemical substance composed of one equivalent of carbon and two equivalents of oxygen; it is a dense gas of specific gravity 1·524, of a poisonous nature: its density causes it to flow to and accumulate upon the floor of a chamber. In an atmosphere containing 10 per cent. of carbonic acid, life can be maintained for a short time only, and a candle for a still less time; indeed, Dr. Angus Smith has observed that three per cent. is fatal if the per-centage of oxygen falls below 18 per cent. in the same atmosphere.

I felt that if the existence of dangerous gases could be made known to the master without man's agency, then the servants would be more particular to observe the laws laid down by the master, and so conduce to the welfare of all.

But to demonstrate to you that the force or power of diffusion is considerable, I place this little apparatus in an atmosphere of coal-gas. The instrument consists of a porous cell, surmounted by a cylinder, in which is placed a piston of brass, the piston being free to move, just as in the case of steam. Immediately that this instrument is placed in an atmosphere of coal-gas, diffusion commences; the gas passing into the porous cell through its walls more rapidly than the air passes out, causes an increase of volume which exerts its pressure on the lower side of the piston, and carries it up through the cylinder, and so causes the red flag to rise.

Fire-damp and choke-damp accumulate slowly under some conditions and rapidly under others; there are, therefore, two main divisions to be met, and I will first explain how I propose to indicate the existence of a slowly accumulating mass of gas in a goaf or other place. For the purpose of indicating by signal a slowly accumulating mass of fire-damp, or of carbonic acid, I use a balloon of thin india-rubber, for, singularly enough, both these gases cause an expansion of the balloon. At first sight one can understand how marsh gas expands the balloon by the law of diffusion, but that carbonic acid should also expand it is so surprising that the effect will require to be explained by a law not yet discovered. Effusion does not take place through india-rubber.

The balloon is filled with atmospheric air, and its neck tied tightly with silk or wax-end, and a piece of linen is bound round the equator of the balloon to prevent lateral expansion. The balloon, so prepared, is placed under a small lever upon a stand of wood, so that it exerts a gentle pressure on the lever. If now any fire-damp or carbonic acid accumulate round it, either of these gases pass through the substance of the india-rubber balloon, and accumulating inside, causes it to expand, thus to press against the lever, and raising it, releases a detent, by which the terminal poles of a battery are connected, whereby we get telegraphic communication with a distant place, or a warning on the spot at will. It must be noted that the temperature of a given place in a mine does not vary from year's end to year's end.

These balloon instruments can be so arranged as to tell if the accumulation be still free from danger, or if it be explosive.

In the event of a sudden irruption of fire-damp, I propose to apply the law of diffusion in all its simplicity, for by this instrument I show at once if there be gas, and I believe that no irruption can be so sudden that this instrument cannot tell of its approach, say in from five to ten seconds, according to the per-centage of fire-damp contained in the dangerous irruption. It may be so delicately set as to give warning if the mixture be still below the explosive point. The instrument consists of an iron funnel, whose stem is bent into a U, the funnel being closed with a plate of unglazed Wedgwood ware (but in my first experiments I used a broken flower-pot), the stem being closed by a cap of brass, through which is passed

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a platinum-tipped copper wire, capable of just dipping into the mercury, previously placed in the bend of the funnel. The distance between the platinum-pointed wire and the mercury regulates the point at which the indication should be given as regards the irruption; that is to say, if a non-explosive irruption is to give its warning, the wire must be brought almost to touch the mercury, but if it be intended to give its alarm for an explosive amount, then it may stand a little farther off, but in no case to exceed the thickness of a shilling. If, when the instrument be ready, gas impinge on the porous tile, diffusion taking place, the pressure of the accumulating gas forces the mercury against the platinum-pointed wire, and the circuit being thus completed, telegraphic warning is given on the spot as well as in the manager's room, if such be desirable, either by a needle or by a bell. I have on the table one of these instruments, and I now show its action. This instrument, when submitted to experiment in some mines at Wigan, and in Northumberland, gives signals in four seconds, and in times varying to nine seconds. The gas not yet being explosive, as tested by the Davy lamp, and by my indicator.

So far I have endeavoured to provide for unknown accumulations; but in the case of known accumulations I have considered that if the amount per cent. could be readily ascertained, then measures in proportion could be taken to sweep out by ventilation such a dangerous mass. I have been led to use the aneroid barometer, which, although far from a perfect instrument, is still reliable, and may be depended on till a better is discovered. In this place I may say that I am now at work at a most beautiful pocket indicator, which I have reason to believe will avoid all the difficulties of the aneroid, and be simply an indicator, not a compound instrument, answering other purposes, as does the aneroid indicator. That marvellous arrangement, the Davy lamp, gives magnificent indications, but I hope to supplement it by another indicator, for it must still be used with my proposed instrument; yet I am not without hope that I shall soon make my instrument self-registering; then I shall hope it will be even more useful than in its present form.

The instrument I now desire to explain to you is an aneroid barometer of the most delicate construction, the brass back of which has been removed, and its place occupied by a porous tile. There are besides one or two minor alterations, such, for instance, as a small valve to be used at pleasure. This instrument acts by pressure on the outside of an aneroid chamber, which by a system of levers causes a hand to travel over a dial face, which is graduated to inches, just as the ordinary aneroid is, so that it can be used as a barometer, and as such can be relied upon. If we desire to experiment for fire-damp or for choke-damp by means of this indicator, it must be taken into the suspected place, and held by the ring handle till it has become of the same temperature as the new place. It is absolutely necessary to follow these instructions, because when the valve is closed the instrument is affected by temperature; when the temperature is equalised, which is usually a short time, and may be known by the fact that the hand remains stationary after the valve is closed, the valve is closed by screwing it tightly, and the position of the hand recorded; then the brass cap which protects the porous tile is removed, and the instrument held up by its handle into the suspected atmosphere, when in about 45 seconds, the maximum effect is produced, and at this time it is necessary to read the barometer accurately, because the maximum point having been reached, effusion takes place, and the hand travels back to zero. Effusion is the mechanical passage of gas through the tile by pressure alone; this action proceeds with the diffusion, hence we never obtain all the effect calculated upon; but directly diffusion ceases, effusion going on empties the chamber of gas; so that if the instrument be held long enough in the same atmosphere, the hand will return to zero, whence it started, and remain there till the instrument is taken into a purer atmosphere, or into one more fully charged; if into an atmosphere more fully charged, the barometer will rise, and this increased reading must be added to the other reading so as to obtain the amount present at the new place. Thus, in one reading, it gives three per cent. of fire-damp. This atmosphere remains, and the hand returns to zero, but the instrument is next placed in an atmosphere which gives seven per cent. on its face, therefore the 7+3=ten per cent., which can be confirmed by taking the instrument into the in-take gallery for a few minutes, and then putting on the cap carry back the instrument to the suspected atmosphere, and it will at once indicate the ten per cent.

All the time the valve is open the instrument is a barometer, therefore it indicates change of altitude, and at the spot one wishes to test the valve is closed. A knowledge of this will preclude the possibility of mistaking change of altitude for gas. I feel sure that a few intelligent observations will make any man as perfectly acquainted with the indicator as with his watch.

It is imperative that the instrument be held by the ring handle, else its action cannot be depended on. I have found that the following figures are to be relied upon for fire-damp and for carbonic acid:—

	With Rising Barometer. Fire-damp.				With Falling Barometer. Carbonic acid.			
				Inches.				*Inches.*
	1	per cent.	=	0·010	1	per cent.	=	0·015
	3	„	„	0·030	3	„	„	0·050
	5	„	„	0·060	5	„	„	0·080
	7	„	„	0·080	10	„	„	0·160
Explosive.	7½	„	„	0·090	15	„	„	0·240
	10½	„	„	0·130	20	„	„	0·330
	12½	„	„	0·170	50	„	„	0·820
	15	„	„	0·220	100	„	„	1·640
	20	„	„	0·320				
	50	„	„	0·800				
	100	„	„	1·680				

I have much pleasure in offering to Mr. Thomas W. Short my sincere thanks for his most valuable co-operation. I had considerable difficulty in meeting with any man who would undertake to make my instruments; in fact, attempt to carry out the ideas I endeavoured to convey to them. At last I met Mr. Short,* and he, with the true spirit of an Englishman, faced all difficulties, determined only to overcome them.

* Of the firm of Marratt & Short, 63, King William-street, London-bridge.

THE following actual experiments were made in a coal pit at the Ince Hall Colliery, on the 7th June 1866, in the presence and with the assistance of some officials of the Ince Hall Colliery Company.

Two aneroid barometers were used, each with tiles of different thickness, with a view to determine the proper thickness. The instrument denoted by the * had the thinner tile.

Time Occupied by Experiment.	Aneroid Barometer Indicator.		Difference.	Amount of Gas Indicated.	Distance from Floor.	Davy Lamp giving to the Underviewer indications as follows:
	Before Experiment.	After Experiment.				
Seconds.	*Inches.*	*Inches.*	*Inches.*	*Per cent.*	*Inches.*	
50	30·65	30·71	0·06	5·00	—	Small cap.
*50	30·40	30·53	0·13	10·50	—	Very explosive.
60	30·52	30·60	0·08	7·00	—	
*50	30·40	30·52	0·12	10·00	—	
50	30·57	30·62	0·05	4·50	24	
*50	30·40	30·50	0·10	8·00	24	Three-inch cap on flame.
50	30·55	30·67	0·12	10·00	40	Lamp exploded sharply.
*50	30·41	30·55	0·14	11·00	36	Lamp exploded sharply.
50	30·50	30·65	0·15	11·50	24	Gas explosive at this point.
50	30·60	30·65	0·05	4·50	6	One-inch top on flame.
*50	30·44	30·50	0·06	5·00	12	Half-inch top on flame.
60	30·59	30·64	0·05	4·50	18	One-inch top on flame.
*50	30·42	30·50	0·08	7·00	18	Three-quarter inch top on flame.
60	30·61	30·65	0·04	4·00	—	
*60 (1)	30·45	30·53	0·08	7·00	18	One-inch top on flame.
60	30·56	30·66	0·10	8·00	18	One-inch top on flame.
*50	30·42	30·56	0·14	11·00	24	Very explosive.
60	30·59	30·70	0·11	8·50	24	Very explosive.
*60	30·55	30·70	0·15	11·50	30	Over explosive point.
50	30·40	30·59	0·19	13·50	30	Flame elongated in lamp, and gave evidence of going out.
60	30·57	30·76	0·19	13·50	36	
*50	30·39	30·51	0·12	10·00	36	Very explosive.
60	30·50	30·74	0·24	16·00	42	Lamp could not be held in this gas without fear of extinction.
*50	30·41	30·62	0·21	14·50	42	

Note.—It was remarked by the underviewer that the lamp indicated a varying amount of gas within a few seconds at the same place. These changes were attributed to the heat from our lamps and from our bodies, and it was found that the lamps and indicators most nearly agreed when both were taken into the gas at the same instant.

(1) It was agreed that this was held 10 seconds too long, as the index hand travelled backwards.

Appendix, No. 5.

PAPER handed in by Mr. *John J. Atkinson*, 7 June 1866.

TABLE showing the Number of DEATHS caused by different Classes of COLLIERY ACCIDENTS, and the the 1st of January 1856, and ending on the 31st of December 1865; prepared by *John J. Atkinson*,

INSPECTION DISTRICTS.	Deaths from Explosions of Fire Damp.													
	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	Totals for 10 Years.	1856.	1857.	1858.
Northumberland, Cumberland, and North Durham.	–	3	11	8	79	10	21	33	7	14	186	36	33*	18
South Durham	3	2	4	2	26	1	2	1	3	4	48	25	24	31
North and East Lancashire	24	53	88	12	8	20	10	8	5	10	238	22	19	27
West Lancashire and North Wales	12	30	11	12	20	31	8	24	10	11	169	39	33	32
Yorkshire	7	198	7	13	14	10	69	1	6	15	340	19	26	25
Derbyshire, Nottinghamshire, Leicestershire, and Warwickshire.	3	15	–	2	3	3	2	4	11	9	52	21	14	16
North Staffordshire, Shropshire, and Cheshire.	8	15	19	12	13	3	6	11	22	12	121	19	23	25
South Staffordshire, and Worcestershire.	21	23	3	16	15	13	8	7	12	8	126	88	81	97
Monmouthshire, Gloucestershire, Somersetshire, and Devonshire.	13	20	7	3	147	4	2	3	6	26	231	34	44	24
South Wales	136	9	50	4	26	16	54	66	6	45	412	56	40	34
Eastern District of Scotland	5	1	3	1	1	4	5	1	1	5	27	18	20	19
Western District of Scotland	3	8	12	10	11	4	3	4	5	9	69	26	16	16
TOTALS	235	377	215	95	363	119	190	163	94	168	2,019	403	373	364

INSPECTION DISTRICTS.	Deaths from Miscellaneous Causes on the Surface of the Earth, and in the Mines.										
	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	Totals in 10 Years.
Northumberland, Cumberland, and North Durham.	23	30	25	30	37	40	242	35	23	44	529
South Durham	26	38	45	43	23	35	30	33	40	46	359
North and East Lancashire	16	11	12	20	13	13	14	18	13	18	148
West Lancashire and North Wales	30	18	16	10	13	22	22	19	29	37	216
Yorkshire	7	12	6	13	8	11†	5	5	7	5	79
Derbyshire, Nottinghamshire, Leicestershire, and Warwickshire.	6	19	10	7	13	30	12	13	16	24	150
North Staffordshire, Shropshire, and Cheshire.	21	18	8	11	9	5	14	9	8	9	112
South Staffordshire and Worcestershire.	10	8	6	16	10	16	9	15	9	13	112
Monmouthshire, Gloucestershire, Somersetshire, and Devonshire.	2	11	12	11	8	14	10	7	15	12	102
South Wales	17	28	34	50	25	20	21	31	26	40	292
Eastern District of Scotland	11	8	8	7	8	21	1	1	4	13	82
Western District of Scotland	5	8	1	2	9	5	4	4	4	11	53
TOTALS	174	209	183	220	176	232	384	190	194	272	2,234

* An error in the account given in the Annual Report is here corrected.

Appendix, No. 5.

PAPER handed in by Mr. *John J. Athinson*, 7 June 1866.

Quantities of COAL raised in each Inspection District in *Great Britain* during Ten Years, commencing on Government Inspector of Mines, and given in Evidence before the Mines Committee in 1866.

Deaths from Falls of Roof and Falls of Coal.								Deaths from Accidents in Shafts.										
1859.	1860.	1861.	1862.	1863.	1864.	1865.	Totals for 10 Years.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	Totals in 10 Years.
33	24	40	42	26	30	26	308	13	8	14	14	13	9	20	5	9	13	118
40	30	30	20	40	30	22	292	8	16	11	11	10	10	4	14	16	10	110
21	26	31	21	37	33	31	268	22	16	11	15	11	18	14	5	13	7	132
29	38	32	31	43	43	38	358	22	24	26	18	18	19	21	20	28	31	227
23	20	25†	24	27	27	22	238	19	9	9	14	8	16	10	17	15	13	130
18	21	21	25	26	30	36	228	16	7	16	13	13	15	4	9	9	13	115
24	22	14	25	15	13	22	202	22	11	13	17	23	20	19	11	11	9	156
92	75	78	80	55	51	48	745	37	27	28	37	44	27	17	33	47	22	319
26	35	44	42	38	33	34	354	12	10	11	7	8	7	6	12	13	10	96
49	55	63	55	54	67	57	530	15	17	13	19	12	11	5	8	6	17	123
19	20	22	31	27	23	17	216	13	9	5	16	7	5	12	8	6	12	93
25	22	21	26	19	15	28	214	11	9	12	10	15	7	5	5	11	6	91
399	388	421	422	407	395	381	3,953	210	163	169	191	182	164	137	147	184	163	1,710

Total Number of Deaths from Accident in, at, and about the Coal Mines.

1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	Totals in 10 Years.
72	74	68	85	153	99	325	99	69	97	1,141
62	86	91	96	89	76	56	88	89	82	809
84	99	133	68	58	82	59	68	64	66	786
103	105	85	69	89	104	82	106	110	117	970
52	245	47	63	50	62	108	50	55	55	787
46	55	42	40	50	69	43	52	66	82	545
70	67	65	64	67	42	64	46	54	52	591
156	129	134	161	144	134	114	110	119	91	1,302
61	85	54	47	198	69	60	60	67	82	783
224	94	131	122	118	110	135	159	105	159	1,357
47	38	35	43	36	52	49	37	34	47	418
45	41	41	47	57	37	38	32	35	54	427
[illegible]	1,122	931	905	1,109	936	1,133	907	867	984	9,916

† The statements in the Annual Reports of the Inspector for Yorkshire include accidents in Ironstone Mines, not embraced in this table.

TABLE showing the Number of Deaths caused by different Classes of Colliery Accidents, and the

INSPECTION DISTRICTS.	Tons of Coal raised, as per Abstract of a Return to an Address of the Honourable the Reports of Mine Inspectors, &c.						
	1856.	1857.	1858.	1859.	1860.	1861.	1862.
Northumberland, Cumberland, and North Durham.	7,950,862	8,428,484	8,549,262	8,798,235	9,232,690	9,500,000	9,800,000
South Durham - - - -	11,104,565	11,310,919	11,746,483	11,905,842	12,560,788	12,879,477	13,198,166
North and East Lancashire - -	5,626,000	5,626,000	5,800,000	6,100,000	6,150,000	6,379,000	6,000,000
West Lancashire and North Wales -	5,800,000	7,000,000	6,500,000	6,842,000	7,800,000	8,000,000	6,500,000
Yorkshire - - - - - -	9,083,625	8,875,440	8,302,150	8,247,100	8,600,000	9,250,000	9,255,500
Derbyshire, Nottinghamshire, Leicestershire and Warwickshire.	4,500,000	4,750,000	5,060,000	5,430,000	6,215,000	6,503,319	6,647,000
North Staffordshire, Shropshire, and Cheshire.	3,000,000	3,200,000	3,400,000	3,700,000	4,000,000	4,300,000	4,600,000
South Staffordshire and Worcestershire.	6,010,500	5,509,625	4,450,000	4,955,780	5,100,000	9,800,000	10,100,000
Monmouthshire, Gloucestershire, Somersetshire and Devonshire.	4,000,000	4,500,000	4,000,000	5,500,000	5,600,000	5,694,000	5,789,000
South Wales - - - - - -	5,400,000	5,200,000	5,700,000	6,000,000	6,254,800	6,800,000	6,900,000
In other Counties in England and Wales.	- -	- -	- -	- -	- -	- -	- -
Eastern District of Scotland - -	4,512,000	4,598,000	4,598,000	5,100,000	5,100,000	5,500,000	6,000,000
Western District of Scotland - -	4,800,000	5,613,473	5,620,000	5,700,000	6,049,424	6,100,000	6,200,000
TOTALS - - -	71,787,552	74,611,941	73,725,895	78,278,957	82,662,702	90,705,796	90,989,666

SUMMARY for Ten Years.

	Number of Deaths.	Proportions per Cent.	
Deaths from fire-damp explosions - - - - - -	2,019	20·36	About one-fifth.
Falls of roof and coal - - - - - - - -	3,953	39·87	About two-fifths.
Shaft accidents - - - - - - - - -	1,710	17·24	Less than one-fifth.
Miscellaneous accidents in mines and above ground - - -	2,234	22·53	More than one-fifth.
TOTAL - - -	9,916	100·00	

Comparison of Results in the First Two with the Results in the Last Two of the Ten Years embraced by the Table.

During the two years 1856 and 1857, there were 2,144 deaths from colliery accidents; and the coals raised during these two years amounted to 146,399,493 tons; whereas, eight years later, in the years 1864 and 1865, 194,034,088 tons of coals were raised; so that if the deaths had increased in the same proportion as the increase of the quantity of coals raised, there would have been 2,841·6 deaths in the two years 1864 and 1865; whereas there were only 1,851 deaths in these two years, being 990·6 fewer deaths in proportion to coals raised; being a reduced fatality to the extent of nearly 35 per cent. in eight years, when considered in relation to the quantities of coal raised.

Quantities of Coal raised in each Inspection District in *Great Britain* during Ten Years, &c.—*continued.*

House of Commons, dated 3 May 1861.				Number of Male Coal Miners employed, per Census of 1861.	Number of Male Coal Miners employed in 1865, as computed by the Inspectors of Coal Mines, 1865.	Number of Persons employed, per Life Lost in 1865.	Tons of Coal raised, per Life Lost in 1865.	Number of Collieries in 1865.
1863.	1864.	1865.	Totals in 10 Years.					
10,000,000	10,156,000	10,409,900	92,825,433	22,719	25,035	258	107,318	165
13,516,855	13,835,544	14,181,433	126,240,072	30,805	33,943	414	172,944	161
6,000,000	5,998,875	6,312,000	59,991,875	23,525	23,525	356	95,636	258
6,500,000	7,500,000	8,000,000	70,442,000	24,302	27,600	238	68,965	180
9,402,500	9,300,000	9,300,000	89,616,315	31,938	35,000	636	169,091	422
7,000,000	7,300,000	7,575,000	60,980,319	23,434	27,089	330	92,383	205
4,900,000	5,200,000	5,600,000	41,900,000	16,427	21,000	403	107,692	226
10,150,000	10,206,000	10,201,500	76,483,405	25,235	27,000	296	112,104	542
5,833,500	5,978,000	6,000,000	52,894,500	21,762	26,658	325	73,170	225
7,217,000	6,948,000	8,531,336	64,951,136	26,292	29,076	182	53,656	338
- -	- -	- -	- -	148	—	—	—	—
6,000,000	6,400,000	6,400,000	54,208,000	18,091	21,150	450	136,170	270
6,300,000	6,300,000	6,400,000	59,082,897	17,795	18,375	340	118,518	223
92,819,855	95,122,419	98,911,169	849,615,952	282,473	315,451	Average. 321	Average. 100,519	3,215

Comparison of Results on considering the Table as divided into Two Quinquennial Periods.

During the first period of five years embraced by the Table, from 1856 to 1860, both inclusive, there were 5,089 deaths from colliery accidents in the kingdom, and during the same period 381,067,047 tons of coal was raised; whereas during the succeeding period of five years embraced by the Table, from 1861 to 1865, both included, 468,548,905 tons of coal was raised; so that if the deaths had increased in the same proportion as the increase in the quantity of coal raised, the deaths during the latter period of five years would have been 6,257·3 in number, whereas they only amounted to 4,827, being 1,430·3 fewer deaths during the second than during the first of the two quinquennial periods embraced by the Table, when taken in connection with the quantities of coal raised. This is a reduction of fatalities to the extent of 22·9 per cent. in five years, being at the rate of 4·58 per cent. per annum, in relation to the coal raised.

The Results exhibited by the Tabular Statement as to the effect of the Act 25 & 26 Vict. c. 79 [7th August 1862] on the Number of Colliery Accidents. [*See* Reply to Question 8,803, in the Evidence.]

During a period of three years (1860, 1861, and 1862), immediately preceding the passing of the Duplicate Shaft Act (1862), there were 3,178 deaths from colliery accidents throughout the kingdom, and during the same period 264,358,164 tons of coal was raised; whereas during the succeeding three years after the Act was passed (1863, 1864, and 1865) there was 286,853,443 tons of coal raised; so that if the number of deaths had increased at the same rate as the coal raised had increased in quantity, the number of deaths during the latter triennial period would have been 3,448·4, whereas the actual number was only 2,758 deaths, being 690·4 fewer deaths during the second than during the first of these two consecutive triennial periods.

This reduction in the fatalities is 20·02 per cent. in three years, when considered in relation to the quantity of coal raised, being a rate of 6·67 or 6⅔ per cent. per annum; indicating that the rate of reduction in the number of deaths has been greater since the passing of the Duplicate Shaft Act, up to the end of 1865, than it was previous to the passing of that Act, when considered in relation to the quantities of coal raised, whatever may have been the cause.

June 1866.

John J. Atkinson,
Government Inspector of Mines.

Appendix, No. 6.

PAPER handed in by Mr. *Thomas Knowles*.

App. No. 6.

DAY SCHOOLS in *Wigan* and Neighbourhood within an Area of about Three Miles.

	Boys.	Girls.	Mixed.	Infants.	Totals.
Wigan:					
Church of England Schools:					
Parish church	350	200	–	150	700
St. George's	200	200	–	–	400
St. Thomas's	300	300	–	–	600
St. Catherine's	350	350	–	–	700
St. James's, Poolstock	–	–	180	120	300
Wigan-lane, Woodcock's	–	–	60	–	60
Gidlow-lane	–	–	60	–	60
Douglas Bank	–	–	60	–	60
Church of England Schools in the Neighbourhood of Wigan:					
Ince	–	–	240	80	420
Hindley	150	150	–	–	300
Haigh	–	–	300	–	300
Standish	150	150	–	–	300
Shevington	–	–	120	–	120
Crook	–	–	100	–	100
Kit Green	–	–	100	–	100
Lamberhead Green	180	100	–	120	400
Goose Green	100	100	–	–	200
Upholland	–	–	150	–	150
Upholland Moor	–	–	150	–	150
Crawford Village	–	–	150	–	150
Pennington Green	60	50	–	–	110
Aspull	–	–	60	–	60
Billinge	100	100	–	–	200
Ashton	–	–	200	150	350
	1,940	1,700	1,930	720	6,290
Wigan:					
Schools of other Denominations:					
St. John's, Roman Catholic	300	300	–	–	600
St. Mary's - - ditto	200	150	–	–	350
St. Patrick's - ditto	250	–	250	–	500
Wesleyan Methodist	–	–	250	150	400
Presbyterian	–	–	180	–	180
British and Foreign Schools	–	–	100	–	100
Schools of other Denominations in the Neighbourhood:					
St. Paul's, Hindley	–	–	100	–	100
Wesleyan Methodists, Hindley	–	–	150	–	150
Ditto - - - - Aspull	–	–	120	–	120
Ditto - - - - Pemberton	–	–	150	–	150
	750	450	1,300	150	2,650

Total number of scholars, 2,650+6,290=8,940. In addition to these, three schools in connection with the parish church of Wigan are in course of erection; one in Ince by the Wesleyan Methodists, one by Pearson & Knowles, in connection with their collieries; and these schools in course of erection will accommodate about 1,200 scholars.

Evening schools in the winter months are kept in connection with the parish church, Wigan, St. George's, St. Thomas's, St. Catherine's, Ince, Lamberhead Green, and Crawford village schools. Evening schools are also kept in the Roman Catholic schools of St. John's, St. Mary's, and St. Patrick's; also the Wesleyan schools at Wigan and Pemberton. There are also many cottage schools in the district. There is also a mining and mechanical school in Wigan, which was originated and is supported by the coal trade.

Appendix, No. 7.

PAPER handed in by Mr. *William Mathews*, 2 July 1866.

BOYS under 18 employed at CLOUGH HALL WORKS, *North Staffordshire*, December 1865. App. No. 7.

AGE.	COLLIERY.		FURNACES.		MILLS AND FORGES.		TOTALS of Number Employed.
	Number Employed.	Average Earnings per Week of 6 days.	Number Employed.	Average Earnings per Week of 6 days.	Number Employed.	Average Earnings per Week of 5½ days.	
		£. s. d.		£. s. d.		£. s. d.	
17 - - -	25	- 15 6	-	- - -	28	- 16 4	53
16 - - -	25	- 12 9	-	- - -	32	- 13 8	57
15 - - -	27	- 12 -	-	- - -	29	- 12 5½	56
14 - - -	32	- 9 6	2	- 8 -	32	- 10 4¼	66
13 - - -	38	- 8 -	2	- 6 6	22	- 8 7½	62
12 - - -	18	- 7 -	4	- 6 3	21	- 7 -¾	43
11 - - -	2	- 6 -	-	- - -	14	- 6 6½	16
10 - - -	- nil -	- - -	-	- - -	9	- 5 5	9
9 - - -	- nil -	- - -	-	- - -	6	- 5 3	6
8 - - -	- nil -	- - -	-	- - -	1	- 5 6	1
	167	3 10 9	8	1 - 9	194	4 11 2	369
AVERAGE - - -	-	- 10 1	-	- 6 11	-	- 9 1½	—
Family more or less dependent on the boys' labour - -	39	- - -	- nil -	- - -	20	—	—

In the Collieries a few of the boys work nights occasionally.

At the Furnaces boys are employed in the day only.

In the Mills and Forges all the boys are subject to night work.

Appendix, No. 8.

PAPER handed in by Mr. *Burns*, and referred to in his Evidence of 6 July 1866.

App. No. 8.

AWARD regarding SPECIAL RULE, Number III., submitted to me by the Right Honourable Secretary Sir *George Grey* and Mr. *Alexander Strathearn*, of *Glasgow*, Agent of, and acting for, certain Coal Masters in the Western District of *Scotland*, who had prepared Special Rules under the Mines Inspection Act, of which the above Rule formed the third.

HAVING accepted the office of arbiter, to which I was appointed as above, I have read the circular, dated Whitehall, 24th April 1856, rescinding the said rule, as also the subsequent correspondence, and carefully considered all the other papers relating to the subject; seen the rules already sanctioned by the Secretary of State for other districts, and maturely weighed the whole matter.

I then held a meeting in Glasgow, on the 31st ult., with Mr. Strathearn, along with four of the gentlemen for whom he acts, and the two Government Inspectors of coal mines, Messrs. Williams and Alexander, and also three of the representatives of the operative colliers, viz., Alexander Macdonald, general secretary for the miners of Scotland; John Muir, local secretary to the Glasgow district of miners; Joseph Donnelly, local secretary to the Maryhill district of miners; and having discussed the subject with them, I prepared and submitted a draft of a new rule in substitution of the rescinded rule (given next column), with which the representatives of the colliers were not satisfied. The Government Inspectors were satisfied with it, and Mr. Strathearn and the gentlemen with him expressed their willingness to comply.

Being well acquainted with the mineral district to which these rules are meant to apply, I find and award that the printed rule No. III. in the accompanying printed copy of General Special Rules, "in terms of the Act 18 & 19 Vict. c. 108," be, as it is hereby declared and found to be, rescinded and annulled, and I appoint the following rule to be inserted and substituted in lieu thereof, among the existing special rules of the collieries of the parties who have desired this arbitration, and to be of the same force and effect as the former, but now rescinded, rule.

Amended Rule III.

"Besides the intimation of apparent safety given by the fireman, colliers must satisfy themselves of the safety of their working places before commencing to work, either at the beginning of a shift, or after any interruption of working during a shift, and shall obey the orders of the underground manager or oversman placed over them in all matters relating to their work, and the ventilation and safety of the pit."

Rescinded Rule III.

"On beginning work at every shift, and which colliers shall be bound to do as soon as they shall have entered and satisfied themselves concerning the safety of their working places (which it shall be their duty to do, independently of the fireman's report), they shall thereupon work at their appointed coal faces continuously and industriously, and without unnecessary intermission, while the shift continues, and shall obey the orders applicable to the safe and proper prosecution of the colliery works, given them by the underground manager or other person for the time placed over them."

Signed by me, at Edinburgh, this 9th day day of August 1856.

(signed) *D. Landale.*

Appendix, No. 9.

PAPERS handed in by Mr. *Ormiston*, 12 July 1866.

App. No. 9.

STATEMENT showing the Average Attendance of SCHOLARS at DAY and EVENING SCHOOLS, in connection with SHOTTS IRONWORKS, *Motherwell, Lanarkshire;* Amount of SCHOOL FEES paid to TEACHERS at these Schools; and, SUMS retained from WORKMEN'S WAGES for EDUCATIONAL PURPOSES, during the Years 1860, 1861, 1862, 1863, 1864, and 1865.

YEAR.	Average Number of Scholars at Day Schools.	Evening Schools.	Total Number of Scholars.	Total Amount Paid to Teachers for School Fees.	Total Amount Retained from Workmen's Wages for Education.
				£. s. d.	£. s. d.
1860 - -	576	255	832	337 8 9	368 16 8
1861 - -	610	199	809	378 4 1	396 16 8
1862 - -	617	146	763	376 4 –	391 – 0
1863 - -	575	132	707	359 6 1	349 2 2
1864 - -	545	114	659	330 8 2	355 5 9
1865 - -	606	154	760	344 15 3	370 3 1
Average of the Six Years -	588	167	755	2,126 6 4	2,231 4 10
Value of school books on hand at end of year 1865 - -				48 13 3½	
Cash in hand - ditto - - ditto - - - - -				18 5 1	
					2,193 4 8½
					38 – 1½
Value of prize books given by School Committee for six years - - - -					24 – –
Expenses of Management for six years - - - £.					14 – 1½

NOTE.

The amount retained from each workman's wages for education, was at the rate of 2½ *d.* per week during the whole six years.

The day schools are open 11 months, and the evening schools, nine months in each year.

The School Committee purchase school books at wholesale prices and retail them to the workmen at cost price; for example, a school book which is usually sold at 1 *s.* in ordinary shops, is thus supplied for about 7½ *d.* or 8 *d.*

In addition to granting the sum of 4 *l.* annually for prize books for the various schools in connection with Shotts Works, and a further sum of 8 *l.* 8 *s.* annually for cleaning schools, the Directors grant free, fire coals to all the schools, and a free house and fire coal to one of the teachers.

STATEMENT showing the Total Amount of WAGES Paid to WORKMEN Employed by the SHOTTS IRON COMPANY in those Departments of their Works where STORES are kept by the Company, the Amount of Cash Advanced to these Workmen between the Pays, and the Total Value of Goods Sold in the Company's Stores, during the Years 1861, 1862, 1863, 1864, and 1865.

YEAR.	Total Amount of Wages Paid.	Amount of Cash Advanced between the Pays.	Total Value of Goods Sold at Company's Stores.	Value of Goods Sold in Stores on Credit.	Value of Goods Sold in Stores for Cash.
	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
1861 - -	70,633 9 7	34,680 8 2	22,031 16 11	5,469 – 1	16,562 16 10
1862 - -	77,076 8 8	37,412 – 6	22,864 6 2	4,879 – –	17,985 6 2
1863 - -	70,126 6 5	30,971 – 7	20,961 17 2	4,238 15 1	16,723 2 1
1864 - -	73,920 1 6	29,180 18 11	20,986 3 8	4,088 14 7	16,897 9 1
1865 - -	81,560 7 4	30,955 16 10	22,732 1 3	4,166 – 3	18,566 1 –
TOTAL - - £.	373,316 13 6	163,200 5 –	109,576 5 2	22,841 10 –	86,734 15 2
Average - £.	74,663 6 8	32,640 1 –	21,915 5 –	4,568 6 –	17,346 19 –

The goods sold for credit, and those sold for cash, making together the sum of 21,915 *l.* 5 *s.*

NOTE.

Fully 76 per cent. of the total amount of wages paid is to workmen employed at the coal and ironstone pits belonging to the Company.

Of the total value of goods sold in the Company's stores, between 3,000 *l.* and 4,000 *l.* per annum will represent the purchases of the general public, the remainder being purchased by persons in the employment of the Company.

Appendix, No. 10.

PAPERS handed in by Mr. *James Baird*, 12 July 1866.

SCHOOLS belonging to Messrs. *Merry & Cunningham.*

STATEMENT of the ANNUAL INCOME and EXPENDITURE.

	Number of Children attending on Average.	Annual Income. Amount Received from Children for School Fees.	Annual Income. Amount Drawn by per centage on Wages.(a)	Total Income.	Cost to Messrs. Merry & Cunningham, for Erection of Schools.	Interest at 5 per Cent. on Cost of Erections.	Annual Expenditure. Salaries paid to Teachers and Assistants.	Annual Expenditure. Cleaning, Lighting, Fuel, and School Furniture, Stationery, &c.	Total Expenditure.	Annual Deficiency paid by Merry & Cunningham.
		£. s. d.	£. s. d.	£. s. d.	£.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
Ayrshire:										
1. Glengarnock School	218	89 8 –	73 – 2	162 8 2	800	40 – –	162 8 2	33 – –	235 8 2	73 – –
2. Ardeer - ditto -	*350	139 – 9	119 10 7	258 11 4	1,200	60 – –	248 13 2	55 5 7	363 18 9	105 7 5
3. Annicklodge ditto -	140	60 – –	30 – –	90 – –	200	10 – –	90 – –	18 – –	118 – –	28 – –
4. Warwickhill ditto -	73	51 7 9	– – –	51 7 9	120	6 – –	51 7 9	2 – –	59 7 9	8 – –
5. Riddance - ditto -	100	52 12 3	96 12 –	149 4 3	560	28 – –	134 9 3	27 3 9	189 13 –	40 8 9
Lanarkshire:										
6. Carnbroe School -	150	60 16 10	55 – –	115 16 10	590	29 10 –	140 – –	18 10 6	188 – 6	72 3 8
7. Woodhall ditto -	65	26 – –	23 8 –	49 8 –	150	7 10 –	52 – –	12 10 –	72 – –	22 12 –
Renfrewshire:										
8. Inkerman School -	226	36 8 –	111 4 1	147 12 1	532	26 12 –	119 16 5	30 19 –	177 7 5	29 15 4
9. Clippens ditto -	50	10 16 –	25 19 –	36 15 –	200	10 – –	48 – –	11 8 –	69 8 –	32 13 –
Dumbartonshire:										
10. Garscadden School -	143	†42 1 7 ‡23 11 –	75 9 7	141 2 2	595	29 15 –	134 17 8	23 4 3	187 16 11	46 14 9
	1,515	592 2 2	610 3 5	1,202 5 7	4,947	247 7 –	1,181 12 5	232 1 1	1,661 – 6	458 14 11

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* Workers' Children, 280
Strangers' ditto 70

† Workers' Children, 110
‡ Strangers' ditto 33

(a) The amount deducted from wages is one penny in the pound, generally. The fees generally are, for one child, 2 *d.* per week; two children, 3½ *d.*; three children, 4½ *d.*; and for four, or as many more as they like, 6 *d.* per week.

In most of the above schools, there are a number of children attending whose parents are not connected with the work, such as adjoining farmers, &c., and who are not included in the statement, as they pay their fees direct to the teacher.

All the schools, except Woodhall and Warwickhill, are under Government inspection, and are year after year reported on very favourably by the inspectors.

The whole of the schools were built at the entire expense of Merry & Cunningham, except Carnbroe, for which, in addition to the above outlay, a Government grant of 380 *l.* was received.

The company also give an annual sum to each school for a pleasure trip, or treat.

Messrs. MERRY & CUNNINGHAM'S STORES.

STATEMENT.

THE amount of wages paid annually by Messrs. Merry & Cunningham, at collieries and ironstone pits, is 243,971 *l.*, of which there is advanced to the workmen between pays, 109,626 *l.*, or 45 per cent.

The amount of purchases by workmen at stores out of these cash advances, is 51,800 *l.*, equal to 47 per cent. of advances, or 21 per cent. of wages.

Besides the above amount purchased by the workmen out of these advances at the stores, there are sales to the extent of 24,500 *l.* yearly.

The profits on transactions averages from 8 to 9 per cent., which would yield upon the purchases from advances, about 4,500 *l.*, and upon the entire sales, 6,600 *l.*

There are 11 stores in all, and three works without stores.

Appendix, No. 11.

Education in Mining Districts.

TABLE showing Per-centage of Scholars over Ten Years of Age in School, of South Staffordshire Mining District. App. No. 11.

—	Name of School.	Per-centage over Ten Years of Age	
		In 1862–3.	In 1865–6.
1	Brierley Hill, N.S.	12	11
2	Brockmoor, N.S.	18	14
3	Corngreaves	33	17
4	Coseley, Christchurch	-	20
5	Coseley West	-	13
6	Gornal, Lower	-	30
7	Gornal, Upper	-	7
8	Kingswinford	-	45
9	Tipton, Horseley Heath	17	23
10	Tipton Hall (St. Paul's)	14	10
11	Wednesbury (St. James's)	13	16
12	West Bromwich (St. Peter's)	10	7
	Average	17	18

H. Sandford.

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TO THE

REPORT

FROM THE

SELECT COMMITTEE

ON

MINES.

Ordered, by The House of Commons, *to be Printed*,
23 *July* 1866.

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See also *Black Damp. Blasting. Cages. Compensation. Contract Working. Coroners' Inquests. Explosions. Falls of Roof. Firemen and Overmen. Inspection. Ironstone Mines. Legal Proceedings. Pony-drivers. Responsibility. Shafts and Shaft Accidents. Up-cast Shafts. Ventilation.*

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Great increase in the wages of colliers in Lancashire; calculation showing that they may earn, and that many do earn, one shilling an hour for the actual time at work, or an average of eightpence an hour for the whole daily time away from home, 11444. 11446–11467. 11480–11484. 11490–11494 ——Rule not to employ boys under twelve at the collieries under charge of witness; practice to require certificates in the case of boys between ten and twelve, 11473, 11474. 11485–11489——Degree of interest taken in education by the colliery masters around Oldham, 11475–11479.

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BOYS:

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1. Number and Ages of Boys in Mines in different Districts.
2. Hours of Labour.
3. Character of the Employment.
4. State of Health.
5. Rate of Wages.

II. *As under increased Restrictions:*

1. Limits proposed as to the Age of Employment and Hours of Labour.
2. Views of Working Miners upon the Question of Increased Restrictions.
3. Effect of further Restrictions as regards Diversion of Mining Labour.
4. Effect as regards the Price of Coal.
5. Effect as regards the Hours of Labour of the Men; Question hereon of a System of Relays of Boys.
6. Objections generally to the proposed Restrictions.

I. *As under Existing Regulations:*

1. Number and Ages of Boys in Mines in different Districts:

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1. Number and Ages of Boys in Mines in different Districts—*continued.*

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Employment of the children in Northumberland and Durham underground for twelve hours a day irrespective of the time occupied in going to and returning from work, &c., *Burt* 6, 7. 71-94——As a rule the children are necessarily engaged from fourteen to fifteen hours a day, including the time occupied in going to and returning from work, &c., *Burt* 6. 86-94; *Crawford* 451, 452——Information as to the time at which the boys in Northumberland commence their work, and as to the actual nature of their employment, *Burt* 71-81. 118-126. 139-146——Those boys who go to the pits at four in the morning do not leave till four in the evening, *ib.* 71-85. 147-150.

Average from eleven to fourteen hours as the daily employment of the boys in the mines about Wigan, *P. Dickinson* 655-657. 672——The boys in the Wigan mines generally enter the pit from five to six in the morning with the colliers by whom they are employed, *Baxendale* 1305-1307——Particulars relative to the hours of employment of boys in the district near Bolton, and the provision made for their education; great difficulty on account of their having about twelve hours of labour, *Ackersley* 2454 *et seq.*——Practice as to the time allowed for meals, *ib.* 2607-2610——Total of about thirteen hours from the time when a boy leaves home in the morning until he returns at night, *ib.* 2614-2618. 2622.

Average labour of the boys for nine or ten hours daily, the men working only eight hours; that is in South Yorkshire, *Normansell* 3033-3040——Employment of the boys in Cheshire for ten full hours, or about eleven hours altogether, *Booth* 4385-4390. 4409, 4410——Labour of the boys in Nottinghamshire for twelve hours in the pit, some of them being fourteen or fifteen hours away from home, *Wilkins* 4665-4668.

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Average labour of boys from eleven to twelve hours when working under their parents in Scotch mines, and for about ten hours when employed by their masters, *M'Donald* 6803. 6813-6815——Inability of the inspector to interfere as to the hours of labour whilst the masters never interfere, *ib.* 6805-6808-6815.

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2. Hours of Labour—*continued.*

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Longer hours of the boys than of the men in the Barnsley district, *Jeffcock* 11730–11732——Employment of boys for eleven or twelve hours in the pits in Staffordshire, *Mathews* 12207, 12208——Several causes owing to which boys, as well as men, are not employed in Staffordshire more than five days a week on an average, *ib.* 12216-12218. 12444, 12445.

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Irksome character of the employment of boys in keeping the doors; obstacle to their reading while thus employed, *Burt* 139–146. 151–160——Modes of employment of boys in the mines in the Wigan district, *Baxendale* 1208–1221——Employment of many more boys by the colliers than by the owners, *ib.* 1308——Occasional ill-usage of the boys by the men under whom they work, *ib.* 1345–1347. 1362-1367——Physical labour of the boys adverted to in support of the proposition for exceptional legislation as to their education and age of employment, *Pickard* 1636–1644. 1656-1667.

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Modes of employment of the boys at mines in Shropshire, some of the work being too laborious, *Onions* 5687-5692. 5754-5760——Information relative to the work performed by the boys in the Durham district, *Parker* 6050–6056. 6093-6095——Way in which the boys are employed under their parents or other colliers for whom they work in South Wales, *Griffiths* 6370-6377——Very hard work of the boys in Scotland, in drawing the coals; serious injury thereby to their health, *M'Donald* 6791-6802. 6816-6819.

With regard to labour of the boys in Lancashire, the work, though hard, is not excessive, nor injurious to their health, *J. Dickinson* 7385-7389. 7394-7397. 7430–7432——Character of the work performed by the boys under twelve, who are engaged by the owners and by the men respectively in witness's district in Scotland, *Moore* 7752–7765——Conclusion as to ten or twelve hours in the pit not being injurious or too laborious for the boys; character of the work adverted to hereon, *Gilroy* 10638–10673. 10742-10745. 10761–10774.

Modes of employment of the boys in the Barnsley district, no particular skill or apprenticeship being essential, *Jeffcock* 11733–11737. 11756–11759——The boys' work is not oppressive in witness's district, *Chambers* 12112——Very light work performed by the boys in Staffordshire, *Mathews* 12204.

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Injurious effect upon the health when boys begin work underground at the early age of ten, *Burt* 118. 189–191——Impression as to the injurious effect produced upon the boys' health in the Wigan district; particulars hereon as to the nature of their employment, *P. Dickinson* 735–762——Injurious effect upon the health through over-employment in mines at an early age, *Baxendale* 1324–1327——Very injurious effect upon the health of the boys through their labour in the mines, *Pickard* 1616, 1617. 1622——Injurious effect upon the health of miners through the amount of work in early life, and the bad ventilation, *Ackerley* 2641–2643.

Dissent from certain evidence as to the injurious effect of mining labour upon the health, *Moore* 8262–8266——Absence of injury to the physical development of the boys, through their labour in the mines, *Atkinson* 2706–2708.

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Good health of the boys in the mines in witness's district, *Knowles* 11532——Healthy condition of the boys in Staffordshire, the labour not having any injurious effect upon their physical condition, *Mathews* 12204–12206——Good physical condition of the boys adverted to, in connection with their rate of wages and mode of employment, *ib.* 12250–12252——Absence of injury to the health of boys in the well-ventilated mines; very injurious effect when the ventilation is bad, *Hood* 13330–13333.

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5. Rate of Wages:

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Amount of earnings of boys of different ages in the mines at Kearsley; interest of the men therein, *Ackersley* 2593–2602. 2653–2656——Rule for the parents to receive and to keep the earnings of their boys who may be working with them, *ib.* 2632–2638——The earnings vary from 6*d.* to 1*s.* 6*d.* a day in the Shropshire mines, *Onions* 5696, 5697——Probability of the same wages being expected if boys worked only eight hours instead of twelve, *Parker* 6124, 6125——The wages are little enough already, *ib.* 6125.

Particulars as to the age at which witness's boys have entered the pits, and as to the wages earned; that is in South Wales, *Griffiths* 6414–6449——Advantage in boys working under their parents, *ib.* 6450–6456——Varying wages of the boys employed by the masters in Scotland, the door boys getting about 1*s.* a day, *M'Donald* 6855–6864——Earnings of the boys from 10*d.* to 2*s.* a day in South Yorkshire, *Jeffcock* 11750.

II. *As under Increased Restrictions;*

1. Limits proposed as to the Age of Employment and Hours of Labour:

Opinion that it would be better if boys were not allowed to go into the mines before twelve or fourteen years of age; witness would prefer the latter limit, though parents generally might object, *Burt* 14–16. 35–40. 105–117. 174–177. 187, 188——Equal efficiency at the age of twenty of those who enter the mines at the age of fourteen as of those who begin at the age of ten, *ib.* 163, 164. 209, 210——Suggestion that children might work only on alternate days, or for only eight hours daily, so as to have time for education, and that they should not be allowed to enter the mines until twelve years of age, *Crawford* 458–471. 488, 489. 521–525.——Expediency of boys not going into the mines at all until twelve or thirteen years of age, *P. Dickinson* 763–772.

Suggestion that whether a boy had been educated or not before employment at twelve years of age, the hours of labour should be only eight hours daily between twelve and fourteen years of age, and ten hours a week at school should be insisted on, *Baxendale* 1222–1234——Restrictions proposed in order to carry into effect the suggestions of witness in regard to the age of employment and the education of boys; increased staff of inspectors necessary for the purpose, *ib.* 1255–1260——Witness proposes that between the age of twelve and fourteen boys should be only eight hours in the mine, including the time required for meals, *ib.* 1275–1279——Question as to there being any restriction upon the age of employment of boys in other trades, besides cotton factories and coal mines, *ib.* 1299–1304——Advantage rather than disadvantage to the employers by shortening the hours of the boys in the pit, *ib.* 1319–1323.

Opinion that boys should be prohibited from entering mines until they are twelve years old, even though they could read and write, *Pickard* 1606–1608——Suggestion that between twelve and fourteen years of age the work should be limited to eight hours daily, and that there should be two hours a day at school for five days in the week, *ib.* 1608–1610——Efficient and steady workmen to be formed by boys if they do not enter the mines until they are twelve years old, *ib.* 2236–2239.

Concurrence in the view that boys under twelve should not be allowed to work in the mines at all, *Ackersley* 2512–2515. 2625–2627——From twelve to fifteen years of age the work should be limited to eight hours daily, *ib.* 2571–2573——Suggestion that boys be not allowed to enter the mines at all till they are twelve years old, and that from twelve to fourteen they work for only eight hours a day, *Normansell* 3048–3050——Witness concurs in the opinion that boys should be excluded from mines until they are twelve years old, *Mottershaw* 3743——Between twelve and fourteen they should work for only eight hours a day, *ib.* 3744.

Concurrence in the suggestion that up to fourteen years of age the boys should work only eight hours, *Booth* 4442–4444; *Wilkins* 4698; *Hall* 4999–5040; *Millward* 5184, 5185. 5227–5235——Advantage if boys were entirely excluded from collieries until the age of twelve, *Owen* 5474. 5645–5651——Suggestion that boys should not work till twelve years, and should work for only eight hours a day between twelve and fourteen, in order to make provision for education, *ib.* 5531. 5532——Expediency of boys working only eight hours daily, so as to have facilities for education, *Onions* 5968——Concurrence in the opinion that boys under fourteen should not work for more than eight hours daily; consideration of sundry objections to this proposal, *Griffiths* 6393 *et seq.*

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Boys—II. *As under Increased Restrictions*—continued.

1. Limits proposed as to the Age, &c.—*continued.*

Suggestion that up to the age of fourteen boys should work only eight hours a day, *M'Donald* 6825, 6826——They should not be admitted to the mines at all until twelve years old, *ib.* 6827.

Grounds for the opinion that no boys should be employed underground until they are twelve years old, and are able to read and write, *Moore* 7772–7775. 7787. 7792, 7793. 7806–7811. 7815. 7833. 7838–7848——Further statement in favour of excluding boys from mines until twelve years old, as otherwise they labour under peculiar difficulties in obtaining any education, *ib.* 8249–8254.

Evidence to the effect that it is very desirable that boys should not go into the mines under twelve years of age, or for as long as twelve hours daily, but that there are obstacles and objections to legislative restrictions on the subject, *Atkinson* 8661–8711——Advantage of less than twelve hours labour up to the age of eighteen, *ib.* 8703–8705.

Doubt whether boys not commencing work till fourteen years old are any less efficient subsequently as hewers, *Sandford* 9651–9656, 9699, 9700——Suggestions as to the age of employment and the hours of labour, and as to the adoption of a system of half time, or of labour on alternate days, *ib.* 9723 *et seq.*——Uncertainty of the amount of full work in collieries adverted to as not presenting any serious difficulties in the way of half time for the boys, on the score of wages, *ib.* 9764–9778. 9794–9798.

Approval on the whole of a prohibition upon the employment of boys under twelve in mines, in order to facilitate education, *Forster* 9936–9939. 9985–9993. 10004.

2. Views of Working Miners upon the Question of increased Restrictions:

Question considered whether it is not in the power of the men to put a stop to the employment of boys under twelve years of age who cannot read and write, *Baxendale* 1235–1258——Expected approval by the more sensible colliers of a prohibition upon the employment of children before the age of twelve, *Pickard* 1609–1615——Question considered whether the men could not enforce the existing provisions of the law in regard to the employment of children, if they were anxious to limit the age and to promote education, *ib.* 1627–1632. 1648–1653——Necessity of strict regulations, or the men will continue to send their children into the mines, to the neglect of their education, *ib.* 1703–1709.

Objection to the boys being twelve hours in the pit, the working colliers, however, raising no such objection on their own account, *Achersley* 2539–2551——Pecuniary motives by which miners are actuated in allowing their children to work before they are twelve years of age; improvement, however, of late years, education being more attended to, *ib.* 2550, 2551. 2559–2564——Obstacles to the men uniting in support of restricting the boys' labour to eight hours daily, though they were successful in obtaining a limitation of their own labour, *ib.* 3141–3148.

General feeling of the men that boys under fourteen years of age should only work for eight hours a day, *Cartlidge* 4068–4070——Feeling in witness's district that boys under fourteen should not work for more than eight hours daily, *Parker* 6065——Expediency of legislation, though it is in the power of the parents to shorten their boys' labour, *Griffiths* 6457–6485.

Constant pressure on the part of miners for the employment of their boys under the age of twelve; unpopularity of the Act in this respect, *J. Dickinson* 7302–7308. 7334. 7403——Feeling generally of the Scotch masters in favour of not employing boys under twelve, the men being for the most part favourable to such employment, *Moore* 7793. 7816–7832. 7847–7853——Very rare complaints by the men as to the employment of children contrary to the Act, in Scotland, *ib.* 8226, 8227——Course pursued by witness in the event of the employment of boys in violation of the Act; blame attributable to the men instead of to the masters, on this point, *ib.* 8231–8239.

Feeling of the better class of workmen in Durham in favour of limiting the age and the hours of labour of boys, *Atkinson* 8668–8671. 8679, 8680——Great desire on the part of many of the workmen to take their children into the mines at an earlier age than twelve, *Evans* 8983–8987. 9062——Feeling of the better class of parents in favour of restrictions upon the age of employment, with a view to better education, *Sandford* 9674–9676——The parents would not at all like a prohibition upon employment until the age of twelve, *Forster* 9939.

Objection by the men rather than by the masters to a prohibition upon employment under twelve, *Potter* 10224——Feeling among the Wigan workmen as to the hardship of a prohibition upon the employment of boys under twelve; inexpediency of any such restriction, *Gilroy* 10592–10597——Feeling of owners against the employment of boys under twelve, though involving instances of hardship as regards the parents, *ib.* 10620. 10692–10703.

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2. Views of Working Miners, &c.—*continued.*

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3. *State of Education of Children in Mines, and of the Mining Population generally.*
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Circumstance of young boys unable to read or write being largely employed by the men in the Wigan district; difficulty as to the latter exercising an effectual check in the interests of education, *P. Dickinson* 692–697. 711–734——The majority of the boys in the mines about Wigan cannot read or write, *ib.* 704, 705——Very little use made of the schools in witness's neighbourhood by the colliery boys, *ib.* 728–734——Improved education on the whole in the Wigan district, the Sunday schools operating very beneficially, *Pickard* 2192–2203. 2272–2274.

Beneficial operation of the Act of 1860, as regards the age and education of boys in the mines at Kearsley near Bolton, *Ackersley* 2446–2453. 2553–2558. 2623, 2624——Great improvement since the Act of 1860 in the state of education of the boys between ten and twelve in South Yorkshire, *Normansell* 3027, 3028. 3041–3043. 3070——Exceedingly uneducated state of the boys in witness's district, so that facilities for attending school are greatly required, *Wilkins* 4678–4691——Increasing tendency to keep the boys at school up to the age of twelve, *Atkinson* 8680–8685.

Gradual improvement in the education of the mining population for some years past, though the standard is still very low, *Sandford* 9598–9605——Beneficial operation of the prize scheme adopted by the coal and iron masters in Staffordshire and Shropshire, *ib.* 9599–9603——Details in support of the conclusion that, as compared with other children, the children of miners in Staffordshire, Worcestershire, &c., do not largely attend the schools, and are very backward in education, *ib.* 9606–9641——Particular instances of mines where many of the boys engaged could not read or write, *ib.* 9616–9639——Absence of any apparent improvement since 1863 or 1864, *ib.* 9640, 9641.

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Satisfactory state of education of the rising generation of colliers in Scotland, whilst very many of those of a more advanced age are quite uneducated, *Robertson* 13294–13298 Reference to a certain document containing information relative to education in connexion with mines in the counties of Lanark, Ayr, and Renfrew, at the time of the Mines Inspection Act; witness will bring this information down to the present time, and submit it to the Committee, *Burns* 13722–13733.

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4. *Particulars relative to the Provision and Conduct of Schools in connection with Mines:*

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Complaint as to each workman at schools in Scotland, whether he has children or not, being obliged to pay 2 *d.* a week towards the school teachers, whereas the men have no voice in the appointment of the teachers, and the charge is moreover too great, *M'Donald* 6878–6886. 6896–6918——Approval of a deduction for the building of schools, *ib.* 6887——Further objection to the deduction for schooling, but only on the ground that the men have no voice in the appointment of the teachers, *ib.* 7258.

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System of deduction of 2 *d.* a week from the wages of each man at witness's works in Scotland on account of attendance at the colliery school, *Robertson* 13204–13219.

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Serious injury to owners when accidents or explosions occur in their mines, the mere infliction of penalties being of little moment, *Evans* 9312–9320. 9333——Expediency of the rule which makes it compulsory upon managers to give notice to the inspector of all cases of explosion, *ib.* 9516–9528.

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FALLS OF ROOF:

1. *Number of Accidents in Different Districts.*
2. *Regulations and Practice as to the Supply of Props, &c*
3. *Suggestions for Improved Regulations.*

1. *Number of Accidents in different Districts :*

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2. *Evidence in approval of Firemen as now appointed, with objections to their being examined.*

1. *Evidence as to the inefficiency generally of Firemen, with suggestions for their Examination:*

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Holidays. Custom in Northumberland of taking holiday every alternate Saturday after pay day; various ways in which the day is spent, *Burt* 414–422——General practice about Wigan of keeping a play Monday after each fortnightly pay day, *P. Dickinson* 1152–1160——Various ways in which the play Monday is kept by the Wigan miners there being a good deal of drinking in some cases, *ib.* 1164, 1165——Varying number of days in the week for which different men work in the Wigan district, there being some who work only seven or eight days in the fortnight, *Pickard* 2215–2224.

Fewer holidays under the system of weekly payments, *Normansell* 3686–3691——Effect of weekly payments in leading to the abandonment of the play Monday in Yorkshire, *ib.* 3688–3691——Custom after the pay Saturday in Shropshire to "play" or take holiday, for half the day on the following Monday and Tuesday, *Onions* 5931–5934.

Increased holidays under the system of weekly payments as compared with fortnightly payments, *Forster* 9913–9917. 10021–10024; *Hewlett* 11212–11214; *J. Booth* 11418; *Knowles* 11584; *Jeffcock* 11641–11643——In Northumberland and Durham the men leave off work entirely on the Saturday after the fortnightly pay, and many of them take holiday on the following Monday and Tuesday, *Forster* 9916–9919——Way in which the holidays are kept by the men in the North of England, *ib.* 9918–9926——Holiday of the boys as well as of the men on the pay Saturday in Northumberland and Durham, *ib.* 10082, 10083——Practice of the men in the Wigan district to take frequent holidays, *Gilroy* 11042–11045.

Hood, Archibald. (Analysis of his Evidence.) Is largely interested in collieries near Edinburgh and Glasgow, and in South Wales, 13301–13306——System of fortnightly payments at the collieries under witness in Scotland, 13307, 13308——Adoption generally of weighing rather than of measuring or yardage in the Scotch collieries; approval of the latter in exceptional cases, 13308–13316. 13407, 13408. 13416, 13417——Satisfaction of the men with the system of weighing at Whitehill colliery, 13310-13313——Facilities for education in connection with Whitehill and Bankhead collieries, 13318–13324.

Obstruction to the working of collieries if boys were entirely excluded from mines until twelve years of age, or if their hours of labour were considerably shortened, 13325–13329——Absence of injury to the health of boys in well-ventilated mines; very injurious effect where the ventilation is bad, 13330–13333——Disapproval of the proposed appointment of pupil assistants under the inspectors, 13334——Valuable training for the office of inspector or viewer by young men being placed under the colliery owners for practical instruction, 13334–1339.

Details relative to the establishment, operation, and eventual abandonment of a mining school in Glasgow, formed for scientific instruction in mining pursuits, 13340–13359. 13379–13404——Statement showing the power of the miners in Scotland to enforce arbitration by way of amendment of the special rules, 13360–13368——Circumstance of there being a combination among the men in some parts of Scotland to restrict the "get" of coals, 13369–13375.

Encouragement given by witness to co-operative stores among the workmen, there being no truck shops in connection with his collieries, 13376–13378. 13420–13428——Disapproval of any arbitrary regulations in regard to the enforcement of weighing, 13405, 13406——Efficient ventilation of witness's mines by means of the ordinary furnace, every care being paid to the detailed working as affecting the ventilation, 13409–13415. 13418, 13419.

Hours of Labour:

Shorter hours of labour after the age of eighteen, or so, when the boys become hewers, *Burt* 161, 162——Longer hours spent in the pits by the boys than by the men, *P. Dickinson* 802–809——Statement of the hours of labour of men, boys, and women respectively, in the Wigan district, *Pickard* 2204–2217. 2243–2247. 2292–2310. 2349–2371.

Energy on the part of the men which makes up for the short hours in the South Yorkshire district, *Normansell* 3067–3069——Arrangement or combination among the men in the South Yorkshire district, by which they work only eight hours daily; exceptions to this rule, *ib.* 3087–3089. 3124–3129——Incentive to hard work when the hours are short, *ib.* 3151, 3152. 3163.

Witness is desirous of seeing the labour of the men reduced to eight hours a day, *J. Booth* 4487–4490——Eight hours work is plenty for men as well as for boys, *Wilkins* 4700——Opinion as to the sufficiency of eight hours' labour for the men as well as the boys; consideration hereon of the earnings of miners in Leicestershire with reference to their present hours of labour, *Hall* 4999. 5005–5017. 5040–5048. 5067–5069——Object of the miners' association

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Hours of Labour—continued.

association to carry out a system of eight hours' labour without any loss of wages, *Hall* 5041–5048. 5067–5069.

Explanation as to witness working chiefly at night, and as to the number of hours for which he works on an average, *Millward* 5208–5211. 5216–5224. 5241–5245. 5311——Average number of hours of daily labour in the coal and ironstone mines respectively in witness's district, *Onions* 5998–6018——Custom in the Durham district to have two shifts of men, there being but one set of boys; particulars hereon as to the mode of working the coals, *Parker* 6066–6092——Practice of the men to work for not more than eight hours a day, many of them not working more than six hours, *ib.* 6066–6073.

Varying hours of labour of the men in different localities in Scotland, the boys generally working a little later, *M'Donald* 6820–6824——Prospect of a reduction in course of time in the hours of labour of the men, *Sandford* 9763.

Average work of the men for nine and a quarter days in the fortnight, or forty hours a week, in witness's collieries, near Wigan, *Knowles* 11585–11587. 11590, 11591——Effect of the eight-hour system in South Yorkshire in greatly reducing the output of coal, and increasing its price, as well as the loss to the owners, *Chambers* 12080–12092. 12119–12121——Belief that the miners' association are seeking to shorten the hours of labour of the men indirectly, through a limit of the hours of the boys, *ib.* 12112.

Increased wages of the Scotch colliers with reference to the hours of labour, the latter having diminished in about the same proportion as the output of coals, *Baird* 14158–14168.

See also *Boys. Holidays. Wages.*

I.

Imprisonment. Statement in disapproval of the power of imprisonment of the men under the Act 4 Geo. 4, for breach of contract; objection also to criminal punishment of the men for breach of contract under the Act of 1860, *J. Dickinson* 8322–8329——Civil offence involved in the infraction of the provisions of the Act by the master, whereas infraction by the workman is a criminal offence, inasmuch as imprisonment may follow, *Burns* 13451–13459. 13462–13466. 13471, 13472.

Ince Hall Collieries. Witness was elected in 1862 by the men in the Ince Hall Mine to look after their interest on the pit's bank, *Mullin* 1822–1825——Constant difference of opinion between witness and the head banksman upon the question of the tubs sent up by the colliers containing proper measure; particulars hereon as to the grounds for the representations and remonstrances frequently made by witness, *ib.* 1826 *et seq.*——Necessity at times of the men sending up short measure on account of the roads not being sufficiently high to admit of full tubs; hardship on the men in these tubs being forfeited, *ib.* 1829 *et seq.*

Forfeiture of 6,656 tubs by the men since November 1862; witness does not know the total quantity sent up, *Mullin* 1854, 1855——Value of witness's services to the men in checking the forfeiture of tubs on the bank, *ib.* 1889–1891. 1915——Explanation as to the men not having taken legal steps to protect themselves against unjust forfeiture of tubs, *ib.* 1892–1908.

Further information relative to the number of tubs forfeited in the Ince Hall Company's mine, the number of men employed, &c., *Mullin* 1909–1914. 1918–1931——Witness is paid by the colliers, his wages amounting to 1 *l.* 8*s.* 6*d.* a week, *ib.* 1916, 1917.

Employment of about 2,000 persons in and about the pits of the Ince Hall Company at Ince and Wigan, *Gilroy* 10535——Numerous schools in the neighbourhood of the company's mines; particulars as to the management of these, and as to the facilities for the attendance of the miners' children, *ib.* 10536–18587——Non-employment of boys under the age of twelve at the Ince Hall Company's pits, *ib.* 10589–10591.

Average of ten hours a day for which the pits in charge of witness work, the men professing to work eleven days in the fortnight, but not really doing so, *Gilroy*, 10626–10629——Actual hours of labour of the boys and men respectively in the Ince Hall Company's pits; the former work quite as long or longer than the latter, *ib.* 10718–10720. 10750–10754. 10761–10774——Longer hours, but less laborious work of those boys who are employed by the masters, *ib.* 10721. 10742–10745.

Employment of about eighty women at the collieries under witness; excellent moral character of these, *Gilroy* 10728. 10731–10736. 10746, 10747. 10787–10789.

Details in explanation and approval of the system of payment by measure at the company's collieries, *Gilroy* 10859 *et seq.*

Explanation relative to some evidence of the witness Mullin in regard to forfeitures at the Ince Hall collieries under the system of measure; inaccuracy of portions of this evidence, *Gilroy* 11013–11030.

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Ince Hall Collieries—continued.

Opinion as to the sufficiency of the present inspection in the case of the collieries under witness; attention paid to the suggestions of the inspector, *Gilroy* 11046–11056——Full power of witness to spare no expense for the safety of the mines, *ib.* 11062.

Table showing the weight and value of each description of mineral taken from the miners of the Patricroft Cannel Mine from November 1862 to March 1866, *App.* 523.

Inclines. Occurrence of accidents on inclines in Durham, but not through the provision of refuges every twenty yards being neglected, *Atkinson* 8818–8823.

See also *Refuges.*

INSPECTION:

1. *Evidence as to the Insufficiency of the present Inspection Staff, and the want of more frequent Inspection without previous Notice.*
2. *Evidence to the effect that the present amount of Inspection is sufficient, and that an increase of Staff is not required.*
3. *Objections to any increase of Inspection tending to interfere with the Responsibility of the Owners and Managers.*
4. *Question as to more frequent Inspection preventing Accidents.*
5. *Practice of the Inspectors as to Visits to the Mines.*
6. *Practice in case of Accident.*
7. *Improvements consequent upon the Inspection.*
8. *Black Damp Mines.*
9. *Proposition by Mr. Woodhouse for the Establishment of a class of Assistant Inspectors.*
10. *Evidence opposed to the foregoing Proposition.*
11. *Suggestions relative to the Appointment of Sub-Inspectors.*
12. *Objections to a class of Sub-Inspectors.*
13. *Number, Qualifications, and Salaries of the Inspectors.*

1. *Evidence as to the Insufficiency of the present Inspection Staff, and the want of more frequent Inspection without previous Notice.*

Want of an increased number of inspectors, or of a body of sub-inspectors, in Northumberland, so that the inspection may be more frequent, and of a more practical kind, *Burt* 256–258. 263–266. 274–286. 293–310——Advantage of frequent inspection without previous notice, *ib.* 305–310——In witness's district, that of Northumberland, there is only one man, more than seventy years of age, to inspect more than 130 collieries, *Crawford* 554——Importance of much more frequent inspection irrespectively of complaints by the men to the inspectors, *P. Dickinson* 907–916——Rare visits of the inspectors except when accidents occur, it being very desirable that they should inspect frequently, and without notice, *Pickard* 1967–1972. 2012–2020——Necessity of an increased number of inspectors in order to inspect the mines more frequently, and to see that the ventilation is properly conducted, *Ackersley*, 2695–2700. 2719, 2720——Insufficiency of the inspection in the St. Helen's district; witness has seen the inspector but once in twelve years, *Woodward* 2809, 2810. 2830–2843. 2865. 2890–2899.

Complaint less against the present Inspection Act than the manner in which it is executed, *Normansell* 3390, 3391——Utter inability of one inspector for the 460 collieries in the district under the inspection of Mr. Morton, *ib.* 3391. 3406–3411——Importance of the mines being inspected frequently, and without previous notice, *ib.* 3412–3417——Witness does not suggest that the inspectors should control the management, but only see that the rules of the Act were enforced, *ib.* 3428. 3446, 3482——Frequent instances of complaint by the men to the inspector, these being sometimes attended to, but the inspector not visiting the pits often enough, *ib.* 3429–3433. 3440.

Further statement as to the inspection staff required in South Yorkshire, *Normansell* 3434–3437——Advantage of a frequent inspection of all collieries, though some are so well managed and ventilated as not to need inspection, *ib.* 3453–3456——Inadequacy of the inspection in Derbyshire and Lancashire, as well as in Yorkshire, some of the inspectors being, however, more vigilant than others, *ib.* 3457–3463. 3492–3498——Labour involved if the inspectors had to see to the observance of all the special rules; expediency of their doing so, *ib.* 3472–3478. 3576, 3577.

Advantage if each colliery were inspected every two months, *Normansell* 3479–3482——Power of the inspectors to visit without previous notice, though in Yorkshire it is the practice to give notice, *ib.* 3483–3491——Expediency of the inspector visiting all accessible places, *ib.* 3504, 3505——Accidental manner in which it becomes known to the men that an inspection is about to take place, *ib.* 3534, 3535——Calculation that three more inspectors for the district of South and West Yorkshire would be sufficient; number of collieries and of pits or drawing shafts comprised in this district, *ib.* 3542–3549. 3594–3605.

Unsatisfactory

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INSPECTION—continued.

1. *Evidence as to the Insufficiency of the present Inspection Staff, &c.*—continued.

Unsatisfactory inspection of mines in Yorkshire, three or four inspectors being required, *Mottershaw* 3890–3893. 3903-3905——Expediency of an increased amount of inspection but without any interference with the responsibility of the owners, *ib.* 3906–3918——Improvement if it were compulsory upon the inspectors to visit the mines unawares, *ib.* 3908. 3921–3923——Inadequacy of the inspection in Derbyshire, it being desirable that every mine should be inspected every two or three months, *Curtlidge* 4236–4247——Insufficiency of the inspection in Cheshire, *J. Booth* 4525-4533——Views of some masters as to the want of better inspection, *ib.* 4618–4620.

Insufficiency of the inspection in witness's district; witness in fact has never seen an inspector, *Wilkins* 4754-4759——Witness has worked in collieries for more than twenty years without ever seeing an inspector in any pit, *Hall*, 5023–5030. 5060–5066——Witness has never seen the inspector in the pit, but the latter has generally been down when there has been an accident, *Millward* 5284–5286——Some improvement is doubtless required in the inspection, *ib.* 5449.

An improved inspection is the chief point required in connection with accidents in mines, *Onions* 6032——Feeling of the Durham miners that the inspector has too much work on his hands, *Parker* 6172. 6267-6270——Further statement as to the expediency of increased inspection, irrespectively of the question of complaints to the inspectors by the men, *ib.* 6281–6288.

Representation as to the insufficiency of the inspection staff in Scotland, *M'Donald* 6774-6778——Recent instance in Scotland of a gross want of inspection; this may be owing to the inspector not having proper time for the laborious duties thrown upon him, *ib.* 6972–6974——Confidence of witness in the inspection, if there were only inspectors enough to exercise it, *ib.* 8412, 8413.

Total inadequacy of the present inspection; in the fiery districts the number of inspectors should be doubled, *Woodhouse* 12821–12826. 12872. 12901–12905——The number should be increased from twelve to eighteen, *ib.* 12825.

2. *Evidence to the effect that the present amount of Inspection is sufficient, and that an increase of Staff is not required:*

Frequent visits of witness to the mines, so that he is at a loss to understand the evidence that some miners have never seen him at all, *J. Dickinson* 7367–7371. 7464–7471——Witness has plenty of time for the discharge of his duties; he considers that the present inspection staff is sufficient, *ib.* 7370, 7371. 7450. 7476, 7477——It is possible that a mine might not be visited for several years, *ib.* 7468–7471——Probability of danger existing in any mine for some time before witness knows anything about it, or without any chance of his finding it out, *ib.* 7647-7650——An addition to the inspectors may be required in time, but at present witness sees no necessity for an increased staff, *ib.* 7654——Immense time required for a detailed inspection of all the mines in witness's district; he repeats that the present inspection is sufficient, *ib.* 7670-7672.

Practice of witness sometimes to visit the mines without reference to complaints or accidents; sufficiency of his inspection generally as contemplated by the Act, *Moore* 7900–7910. 7925–7930——Misconception of the duties of an inspector if it be supposed that he should know the state of every colliery in his district, *ib.* 8210——Opinion that witness is quite equal to the discharge of his duties, so far as the work of inspection is contemplated by the Act, *Atkinson* 8945——Number of collieries in the Midland district; opinion as to the sufficiency of witness's inspection, *Evans* 9117-9126——Witness's time is fully occupied, but he is not overworked, *ib.* 9399, 9400——Circumstance showing that a good deal may be done by inspectors in visiting mines and taking proceedings without the cognizance of the men, *ib.* 9508.

Opinion as to the sufficiency of the inspection in Northumberland and Durham, *Forster* 10118, 10119. 10123——Conclusion as to the sufficiency of the present inspecting staff of witness's district, the owners, however, having no objection to more frequent inspection, *Hewlett* 11323-11341. 11353, 11354——Approval of the present system and amount of inspection, *Jeffcock* 11769. 11774-11777——Expediency, as a rule, of inspectors visiting only in case of accident, *ib.* 11873–11875.

Further inspection is not necessary in Staffordshire, *Mathews* 12315——Belief that the mines in England are at present sufficiently inspected; dissent hereon from the views of Mr. Woodhouse, *Jones* 13117–13125——Power of the Home Office to increase the inspection staff, whilst the inspectors have every facility of visiting the mines, *Robertson* 13244–13247. 13266, 13267——Full approval by mine owners in Scotland of an increase of inspection, if deemed necessary, *Burns* 13721.

Witness considers that he is equal to the inspection of his district, so far as inspection is contemplated by the Act, *Baker* 14423, 14424——Total of about 540 collieries in witness's district, a considerable number of which he has never visited underground, *ib.* 14432–14435. 14452–14461.

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INSPECTION—continued.

3. *Objections to any Increase of Inspection tending to interfere with the Responsibility of the Owners and Managers:*

Strong objection to any increase in the action or functions of the inspectors, which should in any way interfere with the responsibility of the owners and managers in regard to ventilation, &c., *J. Dickinson* 7446–7454. 7478–7482——Conviction that it would be better to repeal the Inspection Act altogether than to go further in the way of inspection, *ib.* 7448, 7449—— Tendency of more frequent inspection to improve the management, it being very inexpedient, however, to make any extension in the inspection which should lessen the responsibility now thrown upon the owners and managers, *Atkinson* 8946. 8957-8963; *Wynne* 14253–14257. 14318–14324.

Concurrence in the objection to increased inspection as tending to decrease the responsibility of the managers, *Moore* 7899. 7903, 7904; *Evans* 9111–9117. 9158–9161. 9170; *Forster* 10130–10143; *Potter* 10228, 10229. 10244–10256. 10318–10322; *Taylor* 10368, 10369. 10391–10394; *Daglish* 10417–10419; *Mathews* 12315. 12337–12339. 12382–12395. 12406–12417; *Baker* 14425–14427——Inability of an inspector to ascertain the actual state of the ventilation except by an examination of the workings in detail, *Chambers* 12051–12053.

4. *Question as to more frequent Inspection preventing Accidents:*

Effect of more frequent inspection in inducing greater care on the part of owners, thereby preventing accidents, *Normansell* 3437-3439——Belief that by proper inspection there would not be anything like the present number of accidents, *ib.* 3434-3446—— Importance of more frequent visits by the inspector, as a check upon accidents, *Owen* 5504–5506. 5521–5523. 5535. 5542–5546.

Examination to the effect that a detailed inspection of all the mines under witness would be quite impracticable, and would not, save in exceptional cases, have the effect of preventing accidents, *Evans* 9289–9311. 9322–9326——Possibility of increased inspection leading to the avoidance of some accidents which now occur through proper precautions not being taken, *Jeffcock* 11809-11815. 11876-11884.

Consideration of the question whether in the case of the numerous collieries not visited by witness, an inspection of each such colliery might not lead to improvement in the management and ventilation, *Baker* 14428–14431. 14452–14466.

5. *Practice of the Inspectors as to Visits to the Mines:*

Explanation that it is not witness's practice to visit mines without some complaint or some special reason for doing so, *J. Dickinson* 7438–7448. 7468–7481——Strict enforcement of the Inspection Act by witness, *ib.* 7450–7452. 7551——Practice of witness in attending to complaints by the miners, and in visiting the pits not only when defects are reported but when accidents occur, *ib.* 7455–7463. 7494–7500.

Witness sometimes inspects a colliery without having received any complaint, and without giving previous notice, *Moore* 7900–7910. 7925–7930. 8218–8221——Practice of the inspectors to visit the mines without previous notice, *Forster* 10115–10117. 10124–10126——Opportunities and practice of the inspectors as to visiting, it being desirable that they should visit mines without receiving special complaints or being expressly summoned, *Potter* 10248–10256——Duty of an inspector to continue visiting an ill-managed mine until improvements were introduced, *Hewlett* 11355.

Practice of witness to visit mines on receiving complaints or on the occurrence of accidents; he also visits any mine that may be peculiarly dangerous, or the management of which is unsatisfactory, *Wynne* 14237–14252——Custom of witness to visit all the collieries that he can without any special reasons for each visit, *Baker* 14436. 14469–14471——Inspection by witness of those collieries more especially which he has reason to believe are badly managed, *ib.* 14467–14482——Objection to the inspectors making returns of the number of pits visited by them, *ib.* 14496–14498.

6. *Practice in case of Accidents:*

Comment upon the course pursued in case of accidents, as regards the visits of the inspector; unfair conclusions likely to be arrived at by the inspector and by the coroner's jury, *Owen* 5506. 5514–5517. 5533–5536. 5542. 5557–5559——Importance of an inspection of any place where an accident happens, before any repairs or alterations are made, *Onions* 5831–5833. 5907. 5935, 5936.

Interval between the report of any defect, or the occurrence of any accident, and the visit of witness, *J. Dickinson* 7462, 7463. 7472–7475.

7. *Improvement consequent upon the Inspection:*

Almost invariable adoption of improvements suggested by witness to the managers, *J. Dickinson* 7532–7537——Tendency of the inspection in South Wales to bring up the condition of the worse collieries to that of the better ventilated ones, *Evans* 9285–9288 —— Approval of inspection as a check upon mismanagement, the question being whether the inspectors visit sufficiently often; advantage of unexpected visits, *Taylor* 10370–10390.

Beneficial

INSPECTION—continued.

7. *Improvement consequent upon the Inspection*—continued.

Beneficial effect of the inspection in the case of the badly managed collieries; these are chiefly visited, *J. Booth* 11508, 11509——Anxiety of the inspectors to prevent accidents, and to show in their respective districts as favourable a result as possible, *ib.* 11509.

Willingness evinced in South Yorkshire to adopt the suggestions of the inspector for the efficient ventilation of the more fiery mines, *Jeffcock* 11792–11797——Advantage in the inspector making representations direct to the owner, *ib.* 11876–11884.

8. *Black Damp Mines:*

Want of inspection quite as much by choke-damp mines as by fiery mines, *Woodhouse* 12920–12925; *Jones* 13118. 13125.

9. *Proposition by Mr. Woodhouse for the Establishment of a class of Assistant Inspectors:*

Suggestions for the establishment of a class of young men who might be termed assistant inspectors, to be appointed by and responsible to the inspectors, *Woodhouse* 12811 *et seq.*——Information to be given to the inspectors by the assistant inspectors, the latter having no power to interfere, *ib.* 12811–12813. 12827, 12828. 12831. 12837, 12838. 12864. 12872. 12907–12912——Contemplated promotion of the assistant inspectors as vacancies occur among the inspectors; efficient staff to be obtained thereby, *ib.* 12814–12817. 12842, 12843.

Witness does not contemplate the assistant inspectors being paid; they should in fact be in the position of pupils, *Woodhouse* 12818. 12855, 12856. 12871——Improbability of the owners objecting to an assistant inspector or pupil being frequently in their mines, *ib.* 12819, 12820. 12857–12864. 12888–12895. 12899. 12900——Contemplated examination before appointment as assistant inspector, *ib.* 12833–12836. 12844–12849.

Illustration in the case of the Oaks Colliery at Barnsley of the useful services to be rendered by the proposed assistant inspectors, *Woodhouse* 12838–12840——Valuable character of the practical training of the proposed class of assistant inspectors so that they would be very competent for the office of colliery viewer as well as of inspector, *ib.* 12852–12854. 12865–12874.

Evidence opposed to the view that the knowledge acquired in the mines by the proposed assistant inspectors might subsequently be used to the prejudice or detriment of the owners, *Woodhouse* 12930–12958. 12960–12964——Proposed check in the inspector but not in the mine-owner, as to the visits of the assistant inspectors to any colliery, *ib.* 12965–12967——Contemplated appointment of only one or two assistant inspectors in each district, *ib.* 12646, 12947.

10. *Evidence Opposed to the foregoing Proposition:*

Sundry objections to a class of assistant inspectors, or pupils, visiting the mines and investigating the detailed management for the information of the inspectors, *Jones* 13027–13036——Statement in further disapproval of the proposition for the establishment of a class of assistant inspectors or pupils who should visit the mines without the permission of the owners, *ib.* 13104–13116. 13126–13140——Decided disapproval of Mr. Woodhouse's proposition in regard to assistant inspectors or pupils; expected objection by the owners generally to this proposal, *Robertson* 13235–13238. 13242. 13262–13265.

Disapproval of the proposed appointment of pupil assistants under the inspectors, *Hood* 13334——Valuable training for the office of inspector or viewer by young men being placed under the colliery owners for practical instruction, *ib.* 13334–13339——Strenuous opposition of the owners in Scotland to the proposed class of pupil inspectors, *Burns* 13721——Decided objection by the masters to the proposal of Mr. Woodhouse in regard to sub-inspectors or inspectors' pupils, *Baird* 14169. 14175–14180——Eligible character of mining engineers and their pupils as the class from which to appoint inspectors, *ib.* 14170–14174.

Reference to a provision in the Act of 1855, prohibiting inspectors from certain work, as showing the objection then entertained against any such system of inspectors' pupils as that proposed by Mr. Woodhouse, *Day* 14192–14197.

11. *Suggestions relative to the Appointment of Sub-Inspectors:*

Practical class of men required as sub-inspectors, *Burt* 293–304——Very inadequate inspection in witness's district, it being very desirable to have a body of practical men as sub-inspectors. *Crawford* 549–564——Want of two sub-inspectors and one inspector for the 103 collieries in the Wigan district, *Pickard* 2012–2016.

Want of a staff of sub-inspectors so that the pits should be visited not less than once a month, *Woodward* 2896, 2897——Superior class of persons required for sub-inspectors, firemen or overmen being generally unfitted for the office, *M'Donald* 8414–8418——Suggestions relative to the appointment of sub-inspectors, that is, if it be decided to increase the inspection, *Atkinson* 8947–8956.

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Inspection—continued.

12. *Objections to a class of Sub-Inspectors:*

Disapproval on the whole of a class of sub-inspectors, though some of the men might fill the office very efficiently, *J. Dickinson* 7655–7661——Concurrence of objections to the appointment of a class of sub-inspectors; mischievous results apprehended, *Moore* 8240–8242. 8255; *Evans* 9127. 9171–9175. 9330; *Forster* 10110–10114; *Potter* 10242, 10243; *Daglish* 10415, 10416; *Booth* 11501, 11502; *Knowles* 11561–11565; *Chambers* 12137, 12138; *Mathews* 12313, 12314. 12366, 12367; *Woodhouse* 12811; *Wynne* 14346, 14347.

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1. *Representations on the part of the Workmen as to the Evils of Payment by Measure.*
2. *Evidence in Defence of the Measuring System, as in force in certain Districts.*
3. *Instances of Complaint by Masters against the System of Measure.*

1. *Representations on the part of the Workmen as to the Evils of Payment by Measure:*

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MERRY & CUNNINGHAM, MESSRS.:

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2. *Spirit Licenses, and Sale of Spirits.*
3. *Schools.*
4. *System of Payment of Wages.*
5. *Magnitude of the Works of the Firm.*

1. *System of Stores, and of Advances in connection therewith:*

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2. *Objections by Masters to Weekly Payments.*
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1. *As to the Responsibility respectively of the Inspectors and of the Owners or Managers:*

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Stanley Colliery (*York*). Particulars relative to the hours of labour and mode of employment of the boys in Stanley Colliery; very few boys under twelve years of age, *Mottershaw* 3725–3742. 3752–3757——Employment and payment of boys in Stanley Colliery by the master instead of by the men, *ib.* 3738, 3739. 3747, 3748——Very few doors used at the colliery; these are swing doors, and doorkeepers are not employed, *ib.* 3763–3768.

Staveley Colliery. Penalties recovered by witness in the case of the Staveley Mine, *Evans* 9508–9515.

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Stoppages or Deductions from Wages. There is no truck system in South Yorkshire, but there are some stoppages which are objected to, *Normansell* 3692–3697——Evidence opposed to any compulsory payment or stoppage from wages in respect of sick or accident clubs, &c., *Cartlidge* 4325–4343; *Wilkins* 4916–4925; *Millward* 5376 *et seq.*

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STORES (SCOTLAND):

1. *Evidence in condemnation of the Stores attached to Coal and Iron Works in Scotland; Complaint as to the evasion thereby of the Truck Act.*
2. *Explanatory Statements on the part of the Owners; denial that the system of Truck is practised.*
3. *Return showing the several Stores in Scotland and the number of Men employed in each case.*

1. *Evidence in Condemnation of the Stores attached to Coal and Iron Works in Scotland; Complaint as to the evasion thereby of the Truck Act.*

Details relative to the operation of the truck system in Scotland, the Truck Act being evaded by the establishment of "stores," so termed, *M'Donald* 7088 *et seq.*——Particulars as to the stores in connection with the extensive works of Messrs. Merry & Cunningham, and as to the system of advances to the men in order to secure purchases from the stores, *ib.* 7089 *et seq.*——Circumstance of Messrs. Merry & Cunningham having eleven licenses at their different works as spirit dealers; influence exercised by them in preventing other persons getting licenses, *ib.* 7091. 7118. 7125–7127.

Liability of the men to dismissal if they do not have advances, and spend some of the money at the stores, *M'Donald* 7093 *et seq.*—— Limited extent to which the men may spend their money at the ordinary shops, *ib.* 7125–7135——Very injurious effect of the stores in the case of improvident workmen, *ib.* 7131–7139——Facility with which the men may obtain spirits, *ib.* 7136–7138——Higher price of the goods at the truck shops than in Glasgow, *ib.* 7139.

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2. *Explanatory Statements on the part of the Owners; denial that the System of Truck is practised:*

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Operation of the law of arrestment as showing the advantage of the establishment of stores, *Burns* 13676–13682; *Ormiston* 13795. 13796. 13815–13821. 13855–13859——Error in designating the stores as truck shops, *Burns* 13676. 13684——Stringency of the provisions of the Truck Act; conclusion that these are not violated by the system of stores, *ib.* 13682–13716——Particular instances of stores being kept without the truck system coming into operation, *ib.* 13684——Denial that truck is practised at the works of Messrs. Merry & Cunningham, *ib.* 13684. 13705——Consideration of the operation of the stores established by the owners as regards the deductions or "off takes" from wages; convenience of the system to the men, *ib.* 13688–13706.

Establishment of four stores in connection with the works of the Shotts Iron Company; denial that these are in the nature of truck shops, *Ormiston* 13739, 13740——Establishment of the stores for the convenience of the workmen and for profit; great inconvenience to the men if the stores were abolished, *ib.* 13741–13745. 13750–13757. 13840–13857——System of credit at the stores in the case of the better class of workmen, it being considered necessary to require ready money from the more improvident men, *ib.* 13745–13749. 13758–13770——Prohibition under the Truck Act against suing for debts incurred at the stores, *ib.* 13748, 13749. 13765–13770.

Explanation relative to the amount of profit made by the Shotts Iron Company from the stores; total of from 1,500 *l.* to 2,000 *l.* a year, *Ormiston* 13771–13778. 13848–13854. 13865–13871. 13880——Particulars relative to the practice of daily advances to the men; denial that there is any condition about purchases being made at the company's stores, *ib.* 13797 *et seq.*——Admission that in making advances a decided preference is given to men who deal at the stores, *ib.* 13804, 13805. 13814–13821. 13835–13839——Statement showing that a large portion of the advances is not spent at the stores at all, *ib.* 13810–13812. 13823–13829.

About 18,000 *l.*, or one-fourth of the total wages is spent at the stores of the Shotts Company in the year, *Ormiston* 13810, 13823. 13872, 13873. 13901——The general public spend 3,000 *l.* or 4,000 *l.* a year at the stores, *ib.* 13810, 13811. 13902, 13903——Various articles sold at the stores; in one case only are spirits sold, *ib.* 13824–13828. 13833——Encouragement given to the men to complain if dissatisfied with the quality or price of the store articles, *ib.* 13834——Dissent from the view that the company have created an artificial

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artificial system of restraint upon the men by the system of advances in connection with the stores, *Ormiston* 13855–13859 ——Witness does not advocate the system of stores, but is desirous of exposing the misrepresentations of it, *ib.* 13859–13861.

Expenditure by Messrs. Merry & Cunningham's workmen of about 70,000 *l.* at the stores, their total amount of wages being 243,000 *l.*, *Baird* 14048–14051——Estimate of 6,600 *l.* a year as the total profit made from the stores, *ib.* 14052, 14053——Explanation as to there being three works without stores, *ib.* 14054–14058. 14120–14124 ——Inquiry made about eight years ago into the working of the system of stores, *ib.* 14055, 14056. 14088–14096.

Details relative to the system of advances in connection with the subsequent expenditure by the men at the stores; preference, as regards advances, to those men who deal at the stores, though there is no obligation upon the men to go to the stores at all, *Baird* 14059–14087. 14097–14107. 14113——Difficulty in stating the amount paid for spirits, *ib.* 14066–14069. 14114. 14117, 14118——Convenience and advantage of the stores to the men, *ib.* 14075–14083. 14103. 14124.

Practice as to the granting of licenses to stores and other places in the same localities; denial of the statement of Mr. M'Donald as to undue influence being exercised in this respect, *Baird* 14108–14112. 14115, 14116. 14139–14148——Inaccuracy of the statement as to there being any special facilities for providing spirits, *ib.* 14132–14135.

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3. *Return showing the several Stores in Scotland, and the number of Men employed in each case:*

List of stores or truck shops held in Scotland by colliery, iron, and mine owners, together with the number of men employed in each case, and the system of payment of wages in each case, *App.* 524, 525.

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SUB-INSPECTORS:

1. *Evidence favourable to the Appointment of Sub-Inspectors.*
2. *Evidence opposed to such Appointment.*

1. *Evidence favourable to the Appointment of Sub-Inspectors:*

Practical class of men required as sub-inspectors, *Burt* 293–304——Very inadequate inspection in witness's district, it being very desirable to have a body of practical men as sub-inspectors, *Crawford* 549–564——Want of two sub-inspectors and one inspector for the 103 collieries in the Wigan district, *Pickard* 2012–2016——Want of a staff of sub-inspectors, so that the pits should be visited not less than once a month, *Woodward* 2896. 2897.

Superior class of persons required for sub-inspectors, firemen or overmen being generally unfitted for the office, *M'Donald* 8414–8418——Suggestions relative to the appointment of sub-inspectors; that is, if it be decided to increase the inspection, *Atkinson* 8947–8956.

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Objection on the whole to a class of sub-inspectors, though some of the men might fill the office very efficiently, *J. Dickinson* 7655–7661——Concurrence in the objection to a class of sub-inspectors; mischievous results anticipated, *Moore* 8240–8242. 8255; *Evans* 9127. 9171–9175. 9330; *Forster* 10110–10114; *Potter* 10242, 10243; *Daglish* 10415, 10416; *Booth* 11501, 11502; *Knowles* 11561–11565; *Chambers* 12137, 12138; *Mathews* 12313, 12314. 12366, 12367; *Woodhouse* 12811; *Wynne* 14346, 14347.

Statement showing that a very efficient sub-inspection is already carried out in the Wigan mines, by means of the several under-officers, *Gilroy* 11004–11012——Inexpediency of a class of sub-inspectors of lower standing than the inspectors, *Hewlett* 11315–11317.

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VENTILATION:

1. *Generally as to the Character and Defects of Furnace Ventilation in the several Districts.*
2. *Improvement required in the Size and Arrangement of the Air Courses.*
3. *Question of Ventilating all Accessible Places or Old Workings.*
4. *Question of Removing the Restriction under the First General Rule.*
5. *Mechanical Ventilation.*
6. *Black Damp Mines.*
7. *Suggested Ventilation by Means of Regulators, without the Use of Doors.*
8. *Suggested Increase of Inspection with reference to the Ventilation.*
9. *Facility for providing ample Ventilation in all Mines.*

1. *Generally as to the Character and Defects of Furnace Ventilation in the several Districts.*

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1. *Generally as to the Character and Defects of Furnace Ventilation, &c.*—cont^d.

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3. *Question of Ventilating all Accessible Places or Old Workings:*

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7. *Suggested Ventilation by means of Regulators, without the use of Doors:*

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8. *Suggested Measure of Inspection with reference to the Ventilation:*

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8. *Suggested Measure of Inspection with reference to the Ventilation*—continued.

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W.

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Combination among the Scotch colliers by which the output of coal is restricted as a means of raising wages; effect of this restriction in raising the price of coal, *Moore* 7821–7837. 7854–7867; *Hood* 13369–13375; *Burns* 13631–13638; *Baird* 14149–14160——Inducement to colliers to employ boys under them as entitling them to put out daily a larger quantity of coal than is allowed under the restrictions of the trade; extra amount allowed for boys of different ages, *Moore* 7821–7828. 7854–7867.

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——Statement relative to certain advances in 1860 and subsequently in the rate of wages in Yorkshire; impression as to the inaccuracy hereon of the evidence of Mr. Normansell, *Potter* 12451–12472.

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Water Gauges. Amendment required on the 13th general rule with reference to steam boilers being provided with water gauges, *Evans* 9414–9425.

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WEIGHING SYSTEM (PAYMENT OF WAGES):

1. *Representations on the part of the Men in favour of Payment by Weight instead of by Measure.*
2. *Representations relative to the Appointment and Powers of Check Weighmen.*
3. *Regulations suggested as to the Conduct of the Weighing.*
4. *Suggested Inspection of the Weights and Machines.*
5. *Explanatory Statements by Owners and Managers, together with objections to Weighing being Compulsory.*
6. *Views expressed by Government Inspectors.*

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1. *Representations on the part of the Men in favour of Payment by Weight instead of by Measure:*

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4. *Character of the Labour, and Rate of Wages.*
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